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ABSTRACT

Efforts of the U.S. Department of Education to verify data submitted by applicants to the Pell Grant program were analyzed by the General Accounting Office. The effects of carrying out the Department's policy or methodology, called "validation," on financial aid applicants and colleges were assessed. Costs of 1982-1983 validation on schools were evaluated through in-depth case studies of a representative sample of 12 schools. Additional analyses involved: a national mail survey of financial aid officers at a stratified random sample of 400 colleges; a mail survey of students at 3 types of schools selected from the 12 in the case studies; review of the Department's recent studies of Pell error; and interviews with federal officials and representatives of private groups. In 1982-1983 the Department increased to 1.66 million the number of applicants who must validate their eligibility. The estimated cost to colleges was less than 1 percent of the total Pell program, which provided $2.4 billion in grants during the year. The Department's studies identify continuing problems with award accuracy and the error is sizable. Recommendations to improve the Department's policies and procedures are offered. Appendices include information on the research design and methodology. (SW)

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BY THE U.S. GENERAL ACCOUNTING OFFICE

Report To The Honorable Paul Simon United States Senate

Pell Grant Validation Imposes Some Costs And Does Not Greatly Reduce Award Errors: New Strategies Are Needed

In 1982-83, in an effort to reduce the continuing problem of error in awarding Pell grants for postsecondary education, the Department of Education increased to 1.66 million the number of applicants who must document or "validate" their eligibility. This increased validation imposed some costs and burdens on the schools and had some impacts on students, although the estimated cost to institutions was less than 1 percent of the total Pell program, which provided $2.4 billion in grants in the 1982-83 school year. This smaller-than-1-percent cost (about $23 million) was not, however, offset, since only about $22 million was clearly saved.

The Department's studies, while limited in some respects, identify continuing problems with award accuracy. The error is sizable: underawards and overawards totaled an estimated $649 million in 1982-83, despite the increased validation. The error is also persistent: the proportion of cases with student error has not decreased. Further, the Department's policy focused on student error and on overawards rather than on both institutional and student error and on both overawards and underawards.

A review of Department policies and procedures shows that improvements are needed in specifying error-reduction goals, developing and testing a broader set of strategies to meet these goals, coordinating the management of error-reduction efforts, and evaluating their effects.

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UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

PROGRAM EVALUATION
AND
METHODOLOGY DIVISION

B-219912

The Honorable Paul Simon
United States Senate

Dear Senator Simon:

In your letter of September 7, 1983, you asked that we analyze the efforts of the Department of Education to verify data submitted by applicants to the Pell grant program. The Department's policy or methodology is called "validation." This report presents data we gathered to respond to your questions about the effects of validation on institutions of higher education which carry out the procedure and on student applicants for financial aid. We also discuss the Department's data showing a continuing problem of error in the grants awarded under this program, our evaluation of the soundness of those data, and our observations on the goals, strategies, and management of the Department's overall reponse to error in the Pell program.

As we arranged with your office, we are sending copies of this report to interested congressional committees, to the U.S. Secretary of Education, to the Acting Director, Office of Management and Budget, and to members of the higher education community. Copies will be made available to others who request them.

Sincerely yours,

Eleanor Chelimsky
Director

GENERAL ACCOUNTING OFFICE
REPORT TO THE HONORABLE PAUL SIMON
UNITED STATES SENATE

PELL GRANT VALIDATION IMPOSES SOME COSTS AND DOES NOT GREATLY REDUCE AWARD ERRORS: NEW STRATEGIES ARE NEEDED

D I G E S T

The Pell program, administered by the Office of Student Financial Assistance in the U.S. Department of Education (the Department), receives more federal funds than any of the 5 other student financial aid programs funded under title IV of the Higher Education Act of 1965 and its amendments. The program awards grants for postsecondary education to students in financial need. In 1982-83, more than 2.5 million students received grants averaging $959 for total program awards of $2.4 billion.

Because studies of the 1980-81 program showed a large problem of inaccurate awards, the Department expanded the number of applicants required to document, or validate, their eligibility. More than 1.6 million applicants were asked to verify information in 1982-83, 5 times the number required the preceding year. Recognizing the effort this would entail, the Department reduced the number of application items to be verified from 6 to 2. Applicants selected for validation had to bring to a school the documents that would prove the accuracy of their information on adjusted gross income and federal income taxes paid. (pp. 9-11)

OBJECTIVES, SCOPE, AND METHODOLOGY

The Honorable Paul Simon, formerly Chairman of the Subcommittee on Postsecondary Education of the House Committee on Education and Labor, asked GAO to examine validation's costs and burdens on schools and students, the origins and goals of the Department's methodology, and alternative approaches. (pp. 93-95)

GAO employed several evaluation strategies. To answer questions on costs and burdens of 1982-83 validation on schools, GAO used two "before and after" designs. (1) To investigate costs in detail, GAO conducted in-depth case studies of 12 postsecondary institutions representing the diversity of schools Pell recipients attend. (2) To obtain more generalizable information, GAO conduct-

ed a national mail survey of financial aid officers at a stratified random sample of 400 institutions participating in the program. (pp. 16-17)

To investigate the effects of validation on students, GAO conducted a mail survey of students at 3 different types of schools selected from the 12 in the case studies. GAO compared the experiences of validated and nonvalidated students. Also, to obtain nationally representative data, GAO included questions on students' experiences with validation in its survey of financial aid officers. (pp. 17-18)

To respond to questions on current validation policy and methodology, as well as alternative approaches to making more accurate awards, GAO reviewed the Department's most recent studies of Pell error and other documents and interviewed officials from the Department, the Office of Management and Budget (OMB), other federal programs, national education associations, and the contractors that process grant applications and carry out error research. (pp. 18-19)

"Error" in the Department's research and in this report refers to a wide variety of discrepancies. Labeling these "student" or "institutional" error does not always mean that applicants or school officials failed to act as they should have. The Department has no information from the Pell research on deliberate inaccuracy. (pp. 53-54, 58)

GAO's findings are limited in several ways. (1) The ability to generalize from the student surveys is limited to the schools from which the samples were drawn. (2) Some cost data were based on recall and may be subject to biases that GAO had no exact way of estimating. (3) GAO excluded some types of schools from the survey, so that its generalizations are to a large proportion of, but not all, postsecondary schools in the Pell grant program. (pp. 19-20)

VALIDATION ACTIVITY INCREASED SUBSTANTIALLY

Validation increased substantially after 1981-82: institutions reported validating 39 percent of their Pell grant recipients in 1981-82, 64 percent in 1982-83. GAO cannot determine how much of the increase came from Department requirements, since some validation was voluntary. In 1982-83, 81 percent of the schools reported validating more appli-

cants than the Department selected. Thirty-two percent also validated all their Pell applicants in 1982-83, a 52-percent increase in the number of schools that did so in 1981-82. The Department has never required 100-percent validation. (p. 23)

Schools reported validating not only more students than the Department required but also more application items: 76 percent of the schools chose to validate items on dependency status, and 62 percent validated other items such as nontaxable income. (p. 25)

INSTITUTIONS EXPERIENCED SOME COSTS AND PROBLEMS WITH VALIDATION

Schools were generally positive toward validation and willing to see it expanded in some form to other financial aid programs, although they reported some costs and other problems with 1982-83 validation. (pp. 34-37)

From 1981-82 to 1982-83, the schools increased their resources for validation, whether required or voluntary. On the average, they reported increasing staff time by one third. Both case study and survey data suggest Pell validation cost the schools an average of about $14 per case, but costs varied from $8 to $47 in the case study schools. At an average cost of $14 each, the 1.66 million validations the Department required in 1982-83 cost schools an estimated $23 million. Many schools automated their data-processing and used other methods aimed at greater efficiency. Validation costs were higher for proprietary schools, schools with a constant influx of new applicants, and schools that handle comparatively few validations. In some schools, there may be a limit to reducing cost by increasing efficiency. (pp. 25-34, 120)

Schools reported award delays (90 percent of the institutions) and problems obtaining documents from government agencies (60 percent) and advising the parents of students undergoing validation (40 percent). Payment delays, in particular, had negative consequences: they required schools to make special accommodations, such as deferring tuition, to help students over a delay. About one quarter of the schools with this problem had internal cash shortages when students could not pay their fees on time. The problems did not vary notably for different types of institutions. (pp. 34-35)

VALIDATION DID NOT GENERALLY AFFECT STUDENTS NEGATIVELY BUT CAUSED PROBLEMS FOR SOME

Although schools reported that students had difficulty obtaining documents from government agencies and with other steps of validation, validated students at the 3 schools surveyed generally did not report difficulty providing required information. Very few, regardless of their validation status, found it difficult to obtain Pell grants. (pp. 39-43)

Validation problems and delays in awards seemed not to have a wide effect on most students' academic plans. Institutions reported that in 1982-83, about 5 percent of the validated students changed their academic plans by enrolling late or deferring enrollment because of validation. GAO's findings suggest that some applicants--about 1 percent--were deterred altogether from higher education by validation problems. Thus, schools estimated that about 69,000 students and potential students may have had their academic plans negatively affected in one way or another. (pp. 44-46)

At the 3 case study schools, awards for about one fourth of all students were delayed. Validation was not the only cause of delay, but more validated than nonvalidated students received delayed awards. Fifty-three to 84 percent of those who received delayed awards reported financial consequences. Most commonly, students borrowed money or made budget cuts until their awards arrived. (pp. 47-48)

PROBLEMS WITH AWARD ACCURACY CONTINUED DESPITE VALIDATION

The Department's research shows somewhat reduced error in 1982-83 but substantial, continuing problems with accuracy. In 1980-81, awards were inaccurate by at least $2 for 71 percent of the recipients, compared to 63 percent in 1982-83. The estimated total of all types of error in 1982-83 was $649 million, equivalent to about 27 percent of the $2.4 billion awarded. (pp. 54-55)

The two sources of error--student or application error and institutional error--are about equal in size. The Department's policy focuses on student error, but the 1982-83 increase in validation was not accompanied by an overall reduction in student error.

In 1980-81, student error was present in 38 percent of the awards. In 1982-83, following the expansion of validation, the figure was 39 percent, including about 30 percent overawards and 9 percent underawards. Errors in adjusted gross income validated in 1982-83 declined about $22 million, but errors increased in other items, keeping overall student error about the same. The estimated dollar value of student error totaled $328 million. (pp. 54-58)

In 1980-81, institutional error was present in 42 percent of the awards. In 1982-83, the figure was 34 percent, including 16 percent overawards and 18 percent underawards. The decrease came mainly from finding fewer signed statements of educational purpose missing from school files, an improvement attributable to the Department's consolidation of forms. (pp. 59-61)

Overawards were more frequent than underawards. In 1982-83, 42 percent of the students received overawards, 21 percent underawards. The average overaward ($444) was larger than the average underaward ($259). Overawards were more often the result of student error, underawards the result of school error. Thus, the consequence of the Department's stress on validation as the corrective action was a closer focus on overawards than underawards. (pp. 54-56)

MODEST EFFORTS TO REDUCE ERROR WERE LIMITED BY INFORMATION GAPS, DECISIONS MADE UNDER PRESSURE, AND UNCOORDINATED MANAGEMENT

The Department has attempted to reduce errors in Pell awards. It has studied the problem. It has expanded validation. It spent about $5.5 million between 1981-82 and 1982-83 on all aspects of validation at Department headquarters and the contractor that processes applications. And it has continued its institutional oversight, training, and monitoring. GAO believes that this is a relatively modest effort, one with only marginal results in error reduction. (pp. 67-68, 77, 88)

Decisionmaking on Pell error is made difficult by an absence of clear purpose and formal goals and targets for quality control. The Department has directed action at application items that result in overawards. It has done significantly less to underawards and school error, and it has done little to prevent

rather than detect and correct error. (pp. 67-68)

The Department's reduction of error is hindered by many information gaps. The Department does not regularly monitor error rates at the institutional level. Data on error are based instead on occasional studies of national samples that varied in design, reducing the ability to compare the findings. The studies do not give reliable estimates of error rates at different types of schools, so that they cannot be targeted for correction. The studies have not evaluated the reasons for student or institutional error, limiting the ability to design corrective action. Information on policy options is often limited, since the Department does not have a program of systematic tests of changes that might be made to increase both student and institutional accuracy. (pp. 62-64, 73)

GAO found that decisionmaking on Pell error commonly has time constraints that make it difficult to consider complex data and weigh alternative strategies. Reacting late in 1981 to reports of error, the Department proposed a large increase in the number of validations for 1982-83 but with uncertain estimates of the cost of an initial proposal for central validation, no systematic data on the costs and burdens of the option finally chosen (expanding on-campus validation), and little time for considering alternatives. The rapid decisionmaking contributed to a misinterpretation of the data, the targeting of validation on only one of several sources of error, and inaccurately high forecasts of savings. (pp. 74-78)

The Department's management problems hinder effective action: the lack of policy on error and fragmentation within the Office of Student Financial Assistance have led to confused responsibilities for identifying and acting on error. Specifically, the responsibilities for identifying inaccuracy and for developing and implementing strategies for correcting it are lodged in several different offices. Results-oriented management is hampered because the Department does not plan or budget resources specifically for corrective action and does not track costs in relation to actual savings to judge efficiency. (pp. 75-77)

GAO found the Department isolated from other agencies that deal with award inaccuracy, and the Department's officials do not examine strategies other agencies use. OMB officials, concerned

about error in Pell awards, have pressed for action without specific suggestions or systematic efforts to identify alternative strategies that agencies might share. (pp. 80-81)

MATTERS FOR CONSIDERATION BY THE CONGRESS

Since the Department's administration of the Pell grant program lacks clear and coherent goals for award accuracy and well-defined strategies to achieve its goals, the Congress might consider whether additional guidance would be helpful to the Department. An error-free environment is clearly not possible, but $649 million in error seems excessive.

Since GAO found many gaps in the Department's evaluative information on error, the Congress might consider whether the data that are available are sufficient for achieving accountability in the administration of the Pell grant program. (p. 89)

MATTERS FOR CONSIDERATION BY THE DEPARTMENT

Since the Department's piecemeal approach to award accuracy has problems of design, implementation, evaluation, and effectiveness, it might consider whether central weaknesses might be corrected with a comprehensive effort to improve its data, set goals for Pell grant accuracy, decide broad strategy, and clarify internal management structure. (pp. 89-90)

MATTERS FOR CONSIDERATION BY OMB

GAO is encouraged by OMB's requiring the Department to develop and implement a plan to reduce error in the Pell program, several of whose points are consistent with GAO's analysis. GAO urges OMB to continue to oversee the Pell program to insure that the issues GAO raises are considered and acted on. OMB could assist the Department by informing it of practices elsewhere in the government that promise to promote accuracy. (p. 90)

AGENCY COMMENTS AND GAO'S RESPONSE

The Department and OMB reviewed a draft of this report. The Department found no factual errors but disagreed with GAO's conclusions on manage-

ment. The Department described several corrective actions that were planned or under way after GAO collected its data. While the Department believes that these form an overall strategy for reducing error, it also argues that only legislative change in design features of the Pell program will make error less likely. GAO believes that the initiatives the Department described fail to address the error problem clearly and show a continuing lack of goals, an uncertain rationale for its choices of strategy, and inadequate plans to improve its data. The Department could do much more within the constraints of current law than it has done. (pp. 133-41)

OMB concurs with GAO's findings and believes them useful. OMB calls the Pell error rate unacceptable and has agreed to inform the Department about practices other agencies have found useful in trying to correct the problem of error. (p. 141)

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ABBREVIATIONS

GAO	U.S. General Accounting Office
GSL	Guaranteed Student Loan program
IRS	Internal Revenue Service
NASFAA	National Association of Student Financial Aid Administrators
OMB	U.S. Office of Management and Budget
OSFA	Office of Student Financial Assistance

CHAPTER 1

PELL GRANTS AND THE PROBLEM OF ACCURATE APPLICATION DATA

The Pell grant program receives more federal funds than any of the five other student financial aid programs funded under title IV of the Higher Education Act of 1965 and its amendments (20 U.S.C. 1070a (1982)). Administered by the Office of Student Financial Assistance within the Office of Postsecondary Education of the U.S. Department of Education ("the Department"), Pell grants are available to all students meeting specific eligibility criteria, the amount of a grant being based on the student's financial need. The students who receive Pell grants are enrolled in a wide range of postsecondary institutions, including colleges and universities, community and junior colleges, hospital schools of nursing, and vocational, technical, and business schools. In the 1982-83 academic year, the program awarded grants ranging from $50 to $1,800, at an average of $959, to help 2,522,746 individuals further their postsecondary education.[1] In 1982-83, the Pell grant program awarded grants totaling $2.4 billion.

Because data from 1980-81 had shown the continued problem of inaccurate awards, the Department in 1982-83 increased the number of students required to present evidence in support of their statements on their applications for Pell grants. The Honorable Paul Simon, chairman in 1983 of the Subcommittee on Postsecondary Education of the House Committee on Education and Labor, asked us to investigate the costs and burdens of "validation," or the verification of data on grant applications, on schools and students. He asked also about the origins and goals of the Department's validation methodology and alternative validation policies and procedures that might be considered.

This chapter begins with a sketch of the conflicting objectives that underlie this system for reviewing applicants' data. Then several kinds of background for understanding our data and conclusions are presented, including a description of how the Pell grant program works and the evidence of error in making awards that prompted the Department to take the validation initiative that is the main focus of our review. The chapter concludes with an outline of the questions that guided our review and the study designs and data sources we used to answer them.

MULTIPLE OBJECTIVES OF THE PROGRAM FORM THE CONTEXT FOR GAO'S REVIEW

Any program that bases awards to individuals on their need must face the decision of how intensively to seek accurate data

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[1]1982-83 is the most recent year for which there was complete program information at the time of our survey.

Table 1

Pell Program Objectives and the Possible Effects of an Applicant Data Review System

Objective	Effect	
	Positive	Negative
Encourage students to attend postsecondary schools	Reducing overawards would save funds, which could be used to increase benefits for all; correcting underawards would give recipients the full aid they are eligible for; both would broaden recipients' choice of schools	The complexity of the control system may affect education plans by delaying awards and deterring some eligible students from applying
Award funds fairly	Would reduce errors, which would target awards better to individual need	None
Respect autonomy of postsecondary schools	Would improve autonomy if schools design their own controls	Would reduce autonomy of schools if controls were fully prescribed
Safeguard individual privacy	Verifying application data from only one source document (or a few) would minimize intrusion	Required documents would enter institutional records systems
Minimize administrative costs	Central direction of controls would encourage efficient and effective methods	Would have costs at all levels (government, contractors, schools)

on that need: the various sources of data differ in accuracy, and efforts to verify accuracy have costs. The Department historically has gathered information about need directly from the applicants for Pell grants and their families, by asking them questions on a form, and has done only a limited amount of checking of the answers. When several studies suggested that this information was sometimes inaccurate, the Department in 1978-79 initiated the method of checking the applicants' data that it calls "validation."

Validation is done by the schools in which Pell grant applicants are planning to enroll. Small in scale at first, the validation system was expanded greatly in 1982-83. With its expansion came growing concern that it might now cause costs and burdens for schools and students that could outweigh the benefits of making more accurate awards and that could also affect other objectives of the program.

Table 1 shows some of the objectives that seem reasonable for characterizing the Pell grant program and some of the possible effects of a system of reviewing applicants' data such as validation. Some objectives could be positively affected and others negatively. Some effects could go either way, depending on how controls are implemented.

We were asked to do this review because of several uncertainties. First, there were no data on costs, burdens, and other effects of increased validation on institutions and students. Second, the Congress was uncertain about the quality of the Department's data on the extent of error in granting awards. The Congress needs data on both errors and the effects of corrective actions such as validation in considering Pell grant program policy and in weighing the importance of different program objectives.

HOW THE PROGRAM WORKS

To be eligible for a Pell grant, an applicant must meet specific requirements of citizenship or residence in the United States, be enrolled at least half time in an eligible program in a school participating in the Pell grant program by formal agreement with the secretary of the Department of Education, and demonstrate financial need. On the premise that the student and the student's family have primary responsibility for meeting the expenses of postsecondary education, one or the other of two formulas known as the "family contribution schedule" is used for assessing the family's financial strength and for estimating the need for financial aid that remains after the family's contribution to expenses.

The formulas are developed annually by the Department and reviewed by the Congress, and they consider indicators of financial strength such as family income and assets, household size,

and the number of family members enrolled in postsecondary education. The formula for applicants who are dependent on their families considers income, assets, and other factors for the parents as well as the student. The formula for self-supporting, or independent, applicants considers a student's (and a spouse's) income and assets, among other factors. The application form requests information on the applicant's living situation and finances for the preceding and coming years in order to determine the student's status as either dependent or independent.

For each applicant, a student-aid index is calculated that represents the extent of need or eligibility for Pell grant funds that remains after the expected family contribution. The smaller the index, the greater the financial need. The index, the cost of education at the student's chosen school, and the student's enrollment status (full-time or part-time) determine the amount of the award. The award increases as the student aid index decreases. An applicant with an index of 0 may receive the maximum award, which for program year 1982-83 was limited to half the costs of attendance and could not exceed $1,800.

Eligibility is calculated by the Pell grant application processor, a private firm under contract to the Department. The firm is expected to provide a variety of services: receive the initial applications and later corrections to applications, enter each application into a computer file, use the computer to check the consistency of the information on the application, calculate eligibility, print and mail a student-aid report that includes the calculated index of eligibility for aid, send information on eligible students to states and institutions, select applications for data verification (and add special instructions to the student-aid reports for those that are selected), respond to questions from applicants in letters and by telephone, and merge records on applicants with records on recipients for statistical purposes after the close of a program year. System Development Corporation in Santa Monica, California, was the contractor in 1981-82, 1982-83, and 1983-84, the 3 program years of our review, and the contractor for 1984-85 through 1986-87 is National Computer Systems in Iowa City, Iowa.

To receive a grant under the Pell program, an applicant may supply the specific data needed for determining eligibility on any one of five different forms. One is the Department's "Application for Federal Student Aid," which is sent directly to the processor. The four other forms that the Department accepts are used by state grant programs and the private need-analysis services that some postsecondary institutions require. The set of processing paths other than the federal form by which applicants may enter the Pell grant program is called "multiple data entry."

These other forms are more extensive than the Department's form and require data that are not used in calculating eligibil-

ity for Pell grants. An applicant filling out one of the four forms who wishes to be considered for a Pell grant checks a box on the form, and the entity that receives that application sends specific data for the applicant by computer tape to the Pell grant processing firm, which continues with the eligibility calculation and other processing steps. In recent years, only 33 to 37 percent of the applications have been submitted on the federal form. The majority of the applications have come from the other sources, chiefly the College Scholarship Service of the College Entrance Examination Board, which accounted for 44 to 47 percent of all Pell grant applications in 1981-82 through 1983-84.

For each applicant, the processing firm creates a computer file and checks the application data for internal consistency and validity. For example, the reported payment of federal income tax may be compared to the expected payment, which can be calculated from the reported adjusted gross income and the legal tax rates, to see if the two figures agree. The processing firm suspends some applications for inconsistent or missing data, sending a form to the applicant and asking for a review and correction or reaffirmation of the original data before proceeding with the calculation of eligibility. If the application data pass the computer checks, the formula is used to calculate the index, which is then sent to the applicant on the student-aid report.

An eligible applicant completes the process by presenting the report to the officials of the participating school, who review additional eligibility criteria, calculate the award, and disburse the funds. An applicant may submit an application for aid for the coming school year any time beginning on January 1, but the schools disburse awards only between July 1 of that year and June 30 of the following calendar year, except in special circumstances.[2] Aid does not automatically continue from one year to the next; students must reapply for each subsequent school year for which they need aid but are eligible for grants for the time required to complete a first bachelor's degree.

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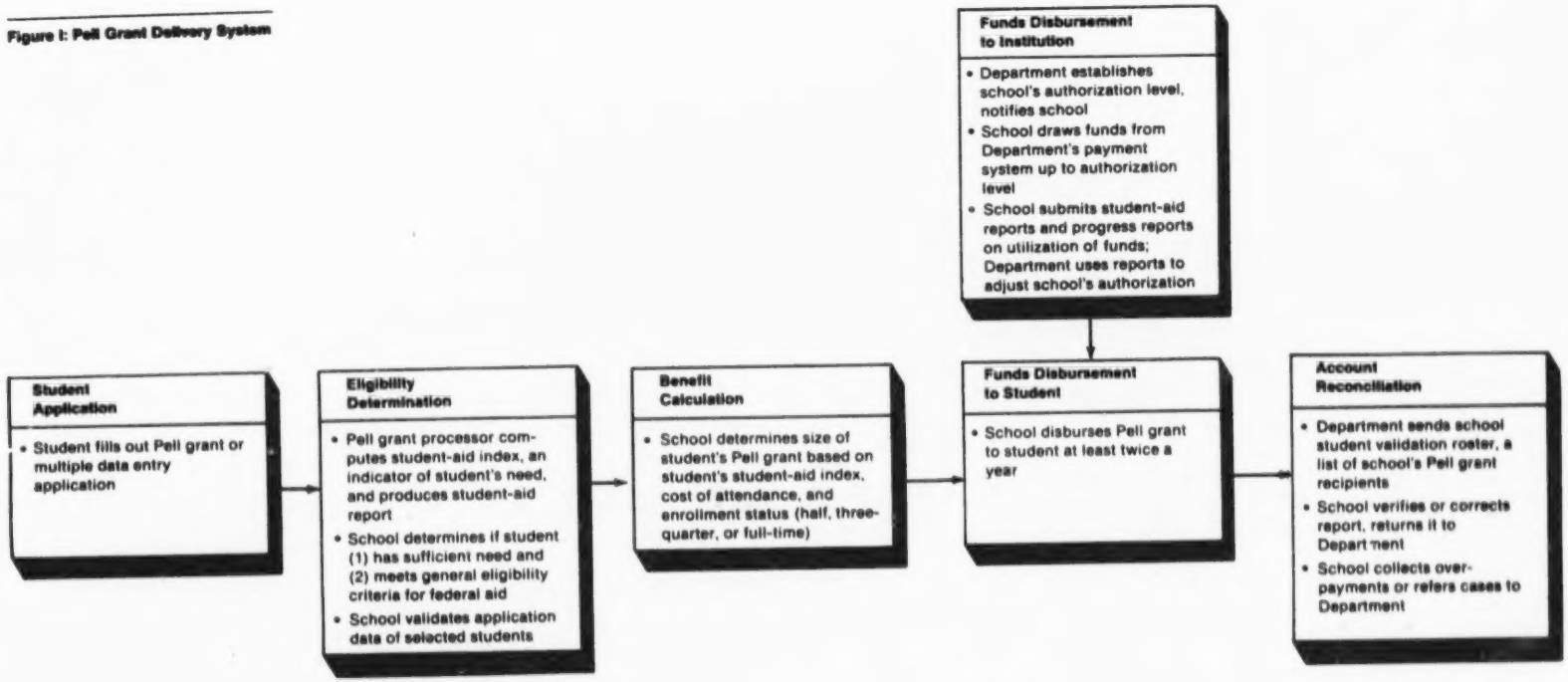
[2]The calculation of eligibility is based chiefly on data about the student and family circumstances in the previous year; a few items are forecasts for the coming year (in which the Pell grant would be used if awarded). An applicant may submit corrected data about the prior year to the processor at any time up to a predetermined cutoff date, on either the applicant's initiative, in response to questioning by the processor after the initial computerized review of the data, or the school's, following its review. There is no requirement that forecast items be corrected if they do not turn out as predicted. If the family situation has changed significantly for the worse since the previous year, an alternative "special condition application" form allows the calculation of eligibility to be based on estimated data for the current year.

Figure I: Pell Grant Delivery System


Funds Disbursement to Institution
• Department establishes school's authorization level, notifies school
• School draws funds from Department's payment system up to authorization level
• School submits student-aid reports and progress reports on utilization of funds; Department uses reports to adjust school's authorization
Student Application
• Student fills out Pell grant or multiple data entry application
Eligibility Determination
• Pell grant processor computes student-aid index, an indicator of student's need, and produces student-aid report
• School determines if student (1) has sufficient need and (2) meets general eligibility criteria for federal aid
• School validates application data of selected students
Benefit Calculation
• School determines size of student's Pell grant based on student's student-aid index, cost of attendance, and enrollment status (half, three-quarter, or full-time)
Funds Disbursement to Student
• School disburses Pell grant to student at least twice a year
Account Reconciliation
• Department sends school student validation roster, a list of school's Pell grant recipients
• School verifies or corrects report, returns it to Department
• School collects overpayments or refers cases to Department

Source: Department of Education Request for Proposals, "Pell Grant Application Processing System," RFP-83-010, December 10, 1982, p. 9.

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Of some 11,000 postsecondary institutions in the United States, in recent years about 7,000 have participated each year in the Pell grant program, taking responsibility for its day-to-day administration, following the regulations and policies for determining students' eligibility on dimensions other than financial need, calculating awards, disbursing grant funds, enforcing academic progress standards, and calculating and making refunds.

Once a school and the Department have entered into an agreement on the general terms of participation in the Pell grant program, the Department periodically advances funds for anticipated awards. The school may pay a student directly by check or by crediting the student's account at the school. Figure 1 is an outline of the basic Pell grant processing system as we have described it so far. In any given year, some number of the schools covered by agreements may not be authorized funds. Of the 7,334 schools covered by agreements in 1982-83, for example, only 5,852 were authorized funds.

A school that wants to have its students participate in the program but is not able or willing to take on all the duties of day-to-day administration may request the Department to calculate and disburse awards directly to the students. In 1982-83, of the 5,852 schools with funds authorized for their students, 816 elected this option; they made up what is called the "alternate disbursement system" while the remaining 5,036 made up the "regular disbursement system." Students who receive Pell grants under either system may receive financial aid from other title IV programs such as the Guaranteed Student Loan and the College Work-Study programs, state and institutional grants and loans, and other sources.

A school that participates in the program must be accredited by the appropriate accrediting organization, must be audited by an independent public accountant every 2 years, and must have a state license as an educational institution that meets minimum standards. The Department's Office of Program Review within the Division of Certification and Program Review periodically reviews the stewardship of the federal funds by examining the administrative capabilities, program compliance, and accounting practices at the participating schools.

The Pell grant program has grown dramatically since it began in 1973. By the peak program year of 1981-82, recipients had grown 15 times the 1973-74 number, from about 176,000 to about 2.7 million. Total funds awarded each year grew almost fiftyfold in the same period, from $48 million to about $2.3 billion. (Program funds increased slightly in 1982-83, the latest year for which there is complete information, but the number of recipients dropped to about 2.5 million.) During the decade from 1973 to 1983, the average grant more than tripled, increasing from about $270 to about $959. When the program began as the Basic Educational Opportunity Grant (or Basic Grant) program

in 1973, only full-time freshmen were eligible to receive grants, but in 1976 eligibility was expanded to include all undergraduates (anyone not already holding a bachelor's degree) enrolled at least half time. The number of applicants has increased tenfold, from 0.5 million in 1973-74 to 5.1 million in 1982-83.

ERRORS IN PELL GRANT AWARDS AND THE DEPARTMENT'S RESPONSE

To award the correct amount to an eligible student and insure that the conditions of the award are met throughout the period it covers requires that many separate activities be carried out accurately and in proper sequence, sometimes under time pressure. (1) Students (and their parents in most cases) must obtain an application form and instruction booklet, gather household financial records, and correctly complete the detailed application. (2) The processors of the various types of non-federal forms must quickly extract specific information from a specific group of the applications and encode it correctly onto magnetic tape to be sent to the Pell grant processor for further processing. (3) The processor must be ready with staff and equipment in multiple shifts to handle the enormous volumes of applications and corrections in the peak months of February through June, entering data, processing it, and printing and mailing the student-aid reports as rapidly as possible so that students and their parents can plan education for the coming year with some idea of the Pell grant funds that could be available. (4) Institutional financial aid officials must review each student's eligibility details and accurately calculate costs and awards, also with a seasonally heavy work load. (5) Later, other school officials must track students' progress throughout the school year and inform the financial aid officials when changes in the students' educational programs require adjustments in their financial aid.

Errors are possible at each step--applying, determining eligibility, calculating and disbursing awards, and monitoring educational programs. The Department does not systematically monitor the administration of Pell grants for timeliness, cost-effectiveness, accuracy, and client satisfaction. However, scattered data are gathered on single criteria by different offices. For example, the Department's inspector general reviews independent auditors' reports on institutions' financial integrity. The processor maintains internal management data on the time taken in processing applications. Department staff review compliance with all student-aid rules by visiting several hundred schools a year in a process called "program review." Although the accuracy of the awards is affected by the actions of the students, the processor, and the institutions, it is not systematically monitored. The Department conducts occasional research studies to estimate the extent of error in awards in a particular year.

Table 2

Student and Institutional Error Found in Two Pell Studies[a]

Contractor	Program year	Student: Sample size	Student: Cases with error	Student: $ error (million)	Institutional: Cases with error	Institutional: $ error (million)	Total (absolute): Cases with error	Total (absolute): Average error per recipient	Total (absolute): Total (million)
Macrosystems	1978-79	2,309	43%	$177	16%	$70	55%	$219	$248
AdTech	1980-81	4,304	41%	$352	37%	$211	69%	$346	$563

[a]All error figures are based on $2 tolerance and calculated without counting errors of missing affidavit of educational purpose or financial-aid transcript, which tends to understate error. The 1978-79 estimates are based on less rigorous verification of application data than those in the 1980-81 study (tending to understate student error in the former) and on discrepancies between verified application data and expected disbursements (the 1980-81 study examined actual disbursements).

In 1981, a Department report on the 1980-81 Pell grant program showed that errors of all kinds totaled an estimated $563 million. The report indicated that an award problem noted in the Department's 1978-79 study of Pell grant accuracy had continued, as table 2 shows. The 1978-79 and 1980-81 studies are not completely comparable because of differences in the program in the years in which it was examined and differences in study methods. We did not verify the reported estimates, but they do indicate a continuing problem of error in the program and have been interpreted this way by Department officials.

The two main sources of error are in the applications and in the institutions. Students may omit data or state them inaccurately on their applications. The institutions may make mistakes in determining initial or continuing eligibility and in calculating and disbursing awards. Processing errors are also possible but have not been extensively examined. A small-scale review that was part of the 1980-81 error study suggested that keystroke error in entering data from application forms to the computer terminal was low.

The Department has made diverse responses to the problem of error. It has tried to lessen institutional error primarily by training the schools' financial aid officials in the Department's rules and procedures and by making program reviews and audits. Error in the applications has been the subject of a wide variety of initiatives. Efforts to deal with it have included (1) improving the language and design of the federal student-aid application form and its instructions, (2) expanding the computer review of application data and questioning applicants about missing or discrepant items, (3) matching the application data with computer files to check the accuracy of reported Social Security and veterans' benefits, and (4) verifying the application data by comparing them with documentary sources before making an award.

The Department refers to the fourth approach as "validation." The Higher Education Act of 1965 requires a person who wants a grant to file an application containing the information and assurances the secretary of the Department finds necessary. The program's regulations authorize the secretary and the schools to request the applicants to provide documents necessary for verifying the accuracy of the application information, including copies of the students' or parents' federal income tax returns. Failure to provide the requested documentation may make the applicant ineligible. The act also provides for criminal penalties for knowingly and willfully submitting false information or otherwise obtaining a grant by fraud.

The Department has required verification from some applicants but not from all recipients. Beginning in 1978-79, the Department used the processing contractor to notify selected eligible individuals that further documentation would be required when the student presented the student-aid report for payment at a school. The Department then required the schools to verify specific items on the selected applications. The selection criteria and the application items to be reviewed changed from year to year through 1981-82, but the proportion of applications to be selected remained constant at 6 to 7 percent.

In response to the research study that showed continuing application and institutional errors in Pell grant awards in 1980-81, the Department decided to focus on application errors and to require verification from many more applicants. In 1982-83, 1.66 million applicants were asked to provide documentary evidence to financial aid offices in support of the data on their original applications--more than five times the 319,000 applications that had been selected the preceding year. Recognizing that this required expanded effort from the schools, the Department reduced the number of items to be verified from the six required in 1981-82--household size, number of household members in college, dependency status, adjusted gross income, federal income tax paid, and nontaxable income--to the two required in 1982-83--adjusted gross income and federal income tax paid. Verification of other items was required for some applicants in both years, depending on discrepancies and other questionable statements on the applications. In both years, dependent applicants whose parents had not filed a federal income tax return were required to provide a signed statement from the parents attesting to this and to the accuracy of the data on the application.

The Department provides extensive instructions and a validation handbook to the financial aid officials who must carry out the verification. The instructions include rules for deciding when a mistaken application item requires formal correction (in which case the student must return the student-aid report to the application-processing contractor, requesting a revised calculation of the eligibility index). A school may issue partial awards even if the verification and recalculation of eligibility

have not been completed, but the school is liable for funds that are awarded in excess of the student's need as determined by the final verification.

The Higher Education Act of 1965 as amended authorizes and requires payment to the participating institutions of an annual administrative allowance of $5 for each Pell grant recipient. This payment may be used for the costs of administering the Pell program, including any validations, as well as the costs of administering other federal, campus-based student aid.

PREVIOUS GAO REVIEWS OF THE PELL GRANT PROGRAM

We have reviewed the Pell grant program several times, most recently when we focused on the administration of the program at proprietary schools.[3] In that review, we reported evidence of institutional errors in 1980-81 in recruiting practices, admission requirements, award and refund computation and disbursement, and the monitoring of the academic progress of the grant recipients. We did not examine practices of the schools, such as the verification of application data, that might respond to the problem of student error. Observations in that review concerning the Department's weak data on error rates of all kinds and on problems with its monitoring and review of the institutions are relevant to our review of overall quality control in the Pell grant program.

In 1981, we examined a 1979-80 sample of all types of schools in the program and found weaknesses in the Department's standards and the institutions' practices of monitoring grant recipients' academic progress. We did not review application or award matters.[4] In two reviews in 1977 and 1979, we reported on conditions in the first 4 years of the program that have changed considerably since then, but we found problems with application data during both reviews and recommended verification in the earlier one.[5]

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[3]U.S. General Accounting Office, Many Proprietary Schools Do Not Comply with Department of Education's Pell Grant Program Requirements, GAO/HRD-84-17 (Washington, D.C.: August 20, 1984).

[4]U.S. General Accounting Office, Students Receiving Federal Aid Are Not Making Satisfactory Academic Progress: Tougher Standards Are Needed, GAO/HRD-82-15 (Washington, D.C.: December 3, 1981).

[5]U.S. General Accounting Office, Office of Education's Basic Grant Program Can Be Improved, GAO/HRD-77-91 (Washington, D.C.: September 21, 1977), reporting on data from 1974-75, and Inconsistencies in Awarding Financial Aid to Students Under Four Federal Programs, GAO/HRD-79-16 (Washington, D.C.: May

OBJECTIVES, SCOPE, AND METHODOLOGY

As the congressional request letter (in appendix I) indicates, this review was prompted by testimony to the Congress that raised general concern about the expansion of validation for program year 1982-83. We were asked to evaluate several effects of the Department's validation policy and to answer several questions on three other topics.

The purpose of validation is either to confirm the accuracy of student application data or to discover errors and correct the data to insure that each award is based on the most accurate estimate of need. Thus, an important outcome of validation to measure is the extent of award error. We were not asked to undertake original data collection for measuring error. The Department had initiated the third in its occasional studies of Pell grant error and the effects of validation on error, and it was to be conducted in 1982-83 as validation was being expanded. However, we were asked to review the quality of the Department's study data and their interpretation. Table 3 shows the topics, the questions, and the major data-collection strategies we used in this review.

Design issues posed by the study questions on institutional and student effects of validation

As shown in table 3, our review involved descriptive, normative, and cause-and-effect evaluation questions and we employed a variety of evaluation strategies to respond to them. The central questions in the review, however, concerned the effects of the 1982-83 validation requirements on institutions and students (topics 1 and 2 in the table). Our major design challenge was to measure these effects, link them clearly to validation, and rule out other possible causes for the observations.

Our final design for responding to these questions included several different strategies. The purpose of using multiple strategies is to provide information that has both depth (that is, is fully accurate) and breadth (that is, is generalizable), since usually no single approach is satisfactory on both grounds. For example, one effect of a larger number of valida-

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11, 1979), reporting on data from 1976-77. No pre-award verification procedure was in effect during either review. The first report made direct recommendations; the Department of Health, Education, and Welfare agreed with the recommendation to increase and strengthen actions to verify applicant information and published pertinent regulations on January 25, 1979. The second report noted continuing discrepancies in application data and supported verification not only in the Basic Grant program but also in the other federal student-aid programs.

Table 3

Study Topics and Questions on Pell Validation with Question Type, Data-collection Strategy, and Page Reference

Topic	Question	Question type	Data-collection strategy	Pages
1. Effects on institutions	a. What costs are incurred by the diverse types of institutions of higher education in doing the validations?	Descriptive	On-site intensive case studies at 12 schools, reviewing records and gathering staff estimates of 1982-83 time use; review of comparable data from 1981-82 study	31-34
	b. Are there other effects of validation on institutions? Are these more serious at particular kinds of institutions?	Cause and effect	National survey of 400 schools on validation experience from 1981-82 to the present	23-37
2. Effects on students	a. What are the effects on students selected for validation?	Cause and effect	Mail survey of samples of students from 3 case study schools (n = 800), both validated and not; national telephone survey of eligible applicants who received no grants; opinions of school officials gathered from 400-school survey	38-49
	b. Do some effects fall disproportionately on particular groups of students?	Descriptive	Same as 2a	38-49
3. Methodology	a. Does the Department base policy on reliable data on error, and have the data been interpreted with appropriate methods?	Normative	Review of contractor reports; interviews with Department, contractor, and OMB officials	62-64
	b. Are the methods for selecting students for validation statistically sound? Are they suited to policy goals?	Normative	Interviews with Department staff and contractor staff who developed and applied the methods	115-18
	c. Does the Department evaluate its methodology and use the findings in regular improvement of its approach?	Descriptive	Same as 3b	72-74, 110-19
4. Current policy	a. What is the goal of the Department's current policy on validation?	Descriptive	Interviews with Department officials; review of records	66-68
	b. How did the Department decide on its goals and methods and with what consideration of burden?	Descriptive	Interviews with Department and OMB officials	75-80
	c. What does it cost the Department to carry out its policy and methods?	Descriptive	Review of Department data on estimates of staff and other costs and contractor's on-site data on work volume and cost, using estimating factors from special study of past 3 years of student corrections	70, 120-21

(Table 3 continued)

Topic	Question	Question type	Data-collection strategy	Pages
5. Alternative approaches and methodologies	a. What are various approaches to the problem of error?	Descriptive	Review of past GAO work and pertinent literature; interviews with staff at Department and at other agencies	122-32
	b. Are there experiences of other federal agencies, or of the private sector, that offer useful suggestions on this problem?	Descriptive	Same as 5a	122-32
	c. Are there alternative methods of preventing or correcting award errors that could offer a better balance of positive and negative effects?	Normative	Analysis of all study data, including opinions on policy alternatives from officials in 400-school survey	122-32

tions could be higher administrative costs for financial aid for postsecondary institutions in 1982-83. Adequately estimating these costs, and the portion attributable to validation, requires detailed interviews with staff to find out how they spent time (since educational institutions typically do not keep such records) and review of school financial records on other costs. Given the effort required and normal constraints on resources, it is realistic to do this only on a limited sample of schools. Other kinds of effect can be estimated from survey responses, which are more efficient to collect and so can be obtained from a larger sample.

Our design for studying effects on institutions included both approaches. We conducted case studies of costs at 12 schools, and we sent a national survey designed to address the other issues to a carefully selected sample of 400 schools. The case studies of costs provided data whose strengths of detail and accuracy were complemented by the strengths of generalizability and extensiveness provided by the institutional survey data.

To answer questions about the effect on institutions of the increase in validation work, we included a "before and after" feature in the case studies and the national survey. In the survey, we asked institutions about 1981-82, the year before the increase in required validations; 1982-83, the year of the increases; and 1983-84, the year after the increases (which was still in progress when we did our survey). The 12 sites for our case studies of financial aid administrative costs in 1982-83 included 9 schools studied by the National Commission on Student Financial Assistance the year before. By using the same categories, definitions, and data-gathering methods in our study, we obtained data comparable to that in the 1981-82 study. The 2

years of data permitted before-and-after analysis of the cost effect of expanded validation at 9 of our 12 schools.[6]

Similar concerns for accuracy and generalizability surfaced in our design of the study of the effects of validation on students, and again we used multiple strategies. First, we sought to achieve acceptable accuracy in answers to our questions about students' validation experiences by using a mail survey. Since surveys of students typically have low response rates, we required that the mail survey sample be drawn from an information source that would provide up-to-date telephone numbers for follow-up. The most generalizable results would have come from a national survey of Pell grant recipients, but no national listings of students could provide telephone numbers. Thus, we decided to survey students at 3 schools rather than at schools scattered around the nation. We chose the 3 schools from the 12 that participated in our cost case studies, because our cost case studies provided us with in-depth information on the validation procedures required of students at these 3 schools (and at the 9 others) and, further, the schools could provide us with up-to-date student records including full names, addresses, and telephone numbers at school and at home. Our design for the student mail surveys thus was chosen explicitly, acknowledging the compromise between the need to have a nationally representative sample of students, the need to have in-depth information about the specific validation procedures students faced, and the need for intensive follow-up to insure enough responses from the group for analysis.

Second, in a partial effort to collect nationally representative data on validation's effects on students, we included in the institutional survey several questions asking campus officials to describe and estimate aspects of students' 1982-83 experiences with validation. We asked about parts of the validation process that students found difficult and about specific effects of validation on students' academic plans.

Third, in order to be as confident as possible in attributing effects on students specifically to validation, we included comparison groups in our design for the student mail survey. The survey questions asked validated students about experiences such as delay in receiving grant funds and changes in academic plans. However, if these experiences had happened commonly to nonvalidated students also, we would not be able to attribute the effects to validation. Therefore, to permit comparisons of the experiences of validated and nonvalidated students, we asked nonvalidated students about delays and changes in academic plans.

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[6]We added 3 schools to the 1981-82 case study group to include some types of schools not studied earlier and thus increase the group's representativeness of the diversity of postsecondary institutions.

Fourth, to insure that the description of effects of validation would be as broad as possible, we expanded the study design beyond a search for the effects of validation on students who enrolled in school and received Pell grants. The difficulties of validation might have been so severe that some applicants would not have followed through to enroll in postsecondary education. To explore this possibility, we conducted telephone interviews with a sample of applicants who had been found to have the maximum eligibility for a Pell grant but had never received one. We also asked the institutions in our national survey whether or not potential students had been deterred from pursuing postsecondary education because of validation.

Data sources

As we discussed in the section above on design issues, in order to obtain data of the depth and breadth we needed on effects on institutions (topic 1 in table 3), we designed our study of institutional effects with two complementary approaches. First, we gathered data for national estimates from a mail survey of financial aid officers at a stratified sample of 400 institutions participating in the Pell grant program. The survey included questions about verification policy, volume of work, the resources used to do that work, the problems that were encountered, and views on the Department's requirements and alternatives.

The 400 schools in our survey were all in the regular disbursement system and had financial authorization for 1981-82 (the latest year for which the Department had a complete machine-readable roster of institutions). Our sample design called for schools that would be representative of 5-year-plus universities, 4-year colleges, 2-year community colleges, and less-than-2-year schools as well as being representative of public, private, and proprietary forms of control. When we examined these categorizations for branch campuses, however, we found discrepancies between a school's name and its classification--several community colleges were listed as 5-year universities, for example. Department officials told us that a branch campus might be classified the same as the central campus that administered Pell funds for the branch, even though the two schools might be quite different. This could occur in a state where the state university receives Pell grant funds from the Department and distributes them for the state's community colleges. Since our sampling required accurate classification of each school by type and form of control, and since the Department could not tell us the extent of this kind of classification confusion for the 806 branch campuses, we excluded all branch campuses from the sampling frame. We did, however, send our survey to a random sample of 100 branch campuses; an analysis of the data showed the responses to be little different from those given by schools in the main survey. Technical details of sampling, response rates, and data analysis for the main insti-

tutional survey and the supplemental branch survey (as well as for the case study schools) are discussed in appendix II.

Second, we obtained detailed cost information from on-site visits to 12 schools that represented well the diversity of the institutions that Pell grant recipients attend. Our teams of investigators spent 7 to 10 staff days at each school to review records, interview officials, and gather directly from staff their estimates of the time they used for validation and other financial aid procedures. We used a listing of six financial aid functions in order to gather time estimates that would allow an analysis of shifts in effort from one function to another as the validation work increased from one year to the next. Our cost case studies were performed under contract by the accounting firm Touche Ross, which had done very similar case studies for the National Commission on Student Financial Assistance at 9 of the 12 schools in the 1981-82 academic year.

To answer the question about the effect of validation on students, we used three complementary data-collection strategies, as we mentioned in the section above on design issues. First, in our national institutional survey, we asked questions about validation's effects on students in 1982-83. Second, we surveyed samples of recipients at 3 of the 12 case study schools. We chose the 3 schools for their differences--a 5-year private university with a policy of 100-percent validation, a 4-year private college defined by the Department as a traditionally black institution, and a public community college with an enrollment of low-income, urban minorities. At each school, we drew samples of about 250 students who were enrolled in 1983-84 and receiving Pell grants. At 2 schools, half of these students had been selected for validation and half had not. At the third school, all recipients had been validated.

Our student survey questionnaire asked the students questions about their experience obtaining Pell grants for 1983-84, including the providing of documents and dealing with the processor to get corrected eligibility. We asked all the students about delays in payment and changes in educational plans so that we could analyze the effects of validation on the students who were selected for validation and those who were not. Even though much of the rest of our review focused on 1982-83, the year of the major expansion of validation, we asked students about 1983-84 in order to stimulate the nearest and most precise recollections, despite the possible loss of comparability because schools had changed policies since 1982-83 or for other reasons.

Third, in order to find out whether validation had been so difficult as to discourage some people from enrolling in postsecondary schools, we planned to conduct telephone interviews with individuals from a sample of 2,000 applicants who had maximum eligibility for a Pell grant in 1982-83 but who had never

received one. We obtained this sample from the Department's merged files on applicants and recipients for 1982-83, which contained 2-year-old addresses. When we attempted telephone interviews with these individuals to discuss their reasons for not enrolling, or for not accepting the Pell grants for which they had been eligible, and the effect of validation on their change in plans, we were able to trace very few from these old addresses. For the 1,084 persons we did trace, we found about 140 usable telephone numbers. We were able to complete only 42 interviews, including interviews with 23 who recalled that they had been selected for validation and 16 who recalled that they had not been selected. (The remaining 3 did not remember if they had been selected or not.)

To answer the three methodological questions (table 3, topic 3), we reviewed the two most recent studies of error in the Pell grant program (performed under contract to the Department for 1980-81 and 1982-83 by Advanced Technology), and we interviewed Department officials and staff at the current and previous application-processing contractors on methods for selecting applications for validation. To understand the issues in the Department's evaluation and improvement of its approach to student error, we interviewed contractors' staff who had provided data for the Department's evaluation and improvement efforts, and we discussed the use of these data in interviews with Department officials.

For the three descriptive questions on current Department policy (see table 3, topic 4), we reviewed manuals, handbooks, circulars, correspondence, testimony and other statements at congressional hearings, congressional committee reports on the Department's requests for special appropriations for Pell grant validation, and other public information. We interviewed officials in many different parts of the Department's Office of Student Financial Assistance, which administers the Pell grant program, and in the Office of Management and Budget (OMB).

To gather data on the costs of the current policy, we asked the Department to estimate various specific costs of performing validations for students attending schools in the alternate disbursement system and of overseeing the national validation effort at schools in the regular disbursement system. We accepted the Department's estimates of time staff spent on validation functions, staff salaries, and other cost elements, but we computed personnel costs from the time and salary data that the Department provided. Labor is the primary element of the Department's costs, and we were not told of any comprehensive system of records that could provide a better source of data on staff time and effort.

We could not determine the costs of validation at the application-processing contractor from vouchers or other headquarters documents, so we gathered data from the contractor's

offices in Santa Monica, California. The element of the contractor's work that varies most importantly with the extent of the validation requirements is the volume of corrections submitted after the applicants have filed their initial applications. We requested a special study of a sample of application files in each of 3 years, beginning with 1981-82, which allowed the contractor to estimate the percentages of corrections applicants submitted after their student-aid reports had been selected for validation. We made the assumption that these corrections were attributable entirely to validation. We applied the percentages to various work-load measures and combined these with cost data in order to estimate how much of the contractor's production costs could be attributed to validation. For staff and subcontractors whose work could be directly assigned to validation, we gathered time estimates from supervisors and other personnel. We requested summary data on other cost elements from the contractor's records, which we accepted without verification.

To answer the questions on alternative approaches to the problem of error in the Pell grant program (table 3, topic 5), we reviewed literature, asked financial aid officials in our national survey for their views on alternative policies, interviewed officials in other federal programs, and discussed future policy directions with Department officials, officers of national education associations, and staff at OMB.

STRENGTHS AND LIMITATIONS OF OUR REVIEW

The data reported in the following chapters have many strengths. Some topics, such as institutional costs of validation, have not been studied before, to our knowledge. With respect to design, this study includes such features as comparison groups of students and before-and-after data on institutions that allow more precise analyses of effects than previously reported. However, specific characteristics of some of the data limit the precision of some estimates and the ability to draw general conclusions from them. Significant limitations include the following:

--Data from the national survey of institutions can be generalized only to 3,912 of the 5,009 institutions from which we drew our sample. The generalizations, or projections, cannot include the nonresponding institutions, branch campuses (although we believe them to be similar to the schools we did survey), or schools in the alternate disbursement system.

--Data from the surveys of students at the 3 schools in our cost case studies can be generalized only to the general group of recipients of aid at these schools (excluding nonrespondents).

--Data on staff time and related costs of validation at the 12 case study schools can indicate what a similar group of schools might report but cannot be used by themselves to estimate costs nationally. Our estimate of the total cost of validation at institutions in 1982-83 rests not only on the case study data but also on the national survey results.

--Data on costs at the case study sites, at the Department's headquarters, and at the processing contractor are estimates based chiefly on efforts to remember how staff used their time; such estimates have an inherent degree of error because of weak or distorted recall. There is no exact way to estimate the extent or direction of bias in the reports of individual employees or their supervisors.

THE ORGANIZATION OF THIS REPORT

Because the main interest prompting the request for this review was in the effects of expanded validation on institutions and students, we address these two topics first, in chapter 2. In chapter 3, we present evidence from the Department's research showing the continuing problem of inaccurate Pell awards and the results of our evaluation of that research. In chapter 4, we analyze the origins and present operation of the Department's policies on error in Pell awards, using three concepts: the goals of corrective action, strategies used to reach the goals, and management activities to support the strategies. Chapter 5 gives a summary of the evidence on the effects of validation, the continuing problem of inaccuracy, and difficulties with the Department's current approach to the issue. It concludes with matters for consideration by the Congress, the Department, and OMB.

CHAPTER 2

EFFECTS OF VALIDATION REPORTED BY SCHOOLS AND STUDENTS

Testimony to the Congress and comments to the Department by the National Association of Student Financial Aid Administrators (NASFAA) about the proposal to expand the validation of Pell grant applicants for 1982-83 included predictions of widespread effects on institutions and students. In testimony before the House Subcommittee on Postsecondary Education and in correspondence to government officials, NASFAA expressed the concern of its members about the proposed expansion. In its testimony before the Subcommittee, NASFAA said

> "The Department has . . . maintained that by limiting the verification to only two data elements it will not impose any significant burdens on institutions and will, at the same time, achieve significant savings in the Pell grant program. Further, they suggest that these steps will not create hardships on students. . . .
>
> "We respectfully disagree with the Department's contentions and feel that such drastic measures are uncalled for at this time. Our fear is these procedures will create unnecessary hardships on the very students the program is primarily designed to serve [and on institutions]."[1]

This statement reflected two specific concerns of the financial aid community. The first concern was that the work required by the increase in the number of applicants to be validated would not be fully balanced by proposed cuts in the number of application items to be reviewed. It was thought that the net effect would be much more work for the schools' already busy financial aid staff.

The second concern was that students especially would suffer from the proposed changes, primarily for two reasons. First, the new procedures might delay the processing of applications. Processing delays might in turn delay awards, which could seriously disrupt students' plans. Second, the required documentation of income (such as federal income tax forms) might be very difficult for many students to obtain, particularly students from the most needy families. There was concern that award delays and documentation demands would be so burdensome as to deter many students from enrolling in school at all.

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[1] Oversight on Current Status and Administration of Federal Student Assistance Programs, Hearing Before the Subcommittee on Postsecondary Education, Committee on Education and Labor, U.S. House of Representatives, 97th Cong., 2nd sess. (Washington, D.C.: U.S. Government Printing Office, 1982), p. 303.

Although similar concerns had been raised in comments on the first validation regulations in 1978, by 1982 data were still not adequate to settle many questions about how validation works. Hence, NASFAA's members feared that the Department's proposal to expand validation for 1982-83 would create substantial new burdens for the institutions and students participating in the Pell grant program.

Exploring these predictions was one of the main purposes of our study. As we discussed in chapter 1, to obtain in-depth information about the administrative costs of financial aid and the effects of the Department's changes on these costs, we conducted case studies of the administrative costs of financial aid at 12 postsecondary institutions. Nine provided before-and-after information on institutional costs and burdens. To obtain nationally generalizable information, we conducted a national mail survey of institutions, asking them to report changes in institutional costs and burdens associated with validation in 1981-82, 1982-83, and 1983-84.

To estimate the effects on students, we conducted a mail survey of validated and unvalidated students at 2 schools and students at a third school that validates all aid applicants. To explore the possibility that validation deterred students from pursuing a Pell grant and, thus, enrolling in school, we conducted telephone interviews with validated and unvalidated Pell grant applicants who had maximum eligibility but did not receive awards.[2] Using multiple methodologies to obtain both in-depth data and generalizable information, we sought comparative data in order to strengthen any attribution of problems to Pell validation and changes in the program.

We found evidence that the Department's expanded 1982-83 validation procedures have increased institutional work loads for all types of institutions (public and private colleges, universities, community colleges, and proprietary, or commercial, schools). Validation activity at institutions has increased substantially since 1981-82, and the institutions have increased the resources they use for validation. However, most institutions reported voluntarily validating more students than the Department requires, and most have positive attitudes about the need for validation. As for students, some experience delays in awards and similar problems, but most seem not to find validation particularly troublesome, and relatively few seem to encounter problems that affect their educational plans.

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[2]All mail survey data reported in this chapter are based on the actual number of responses to survey items. Unless otherwise indicated, the figures are projections to (or, rather, estimates for) the appropriate population of schools or students. All populations have been adjusted to exclude survey nonrespondents. See appendix II for details about our samples and populations.

Modest effects on institutions, positive institutional attitudes about the need for validation, and limited effects on students are not the whole story, however. The Department's 1982-83 changes in validation procedures appear not to have created the serious side effects on schools and students that many feared, but validation does have some costs for schools and some effects on students, whether it is required by the Department or done voluntarily by the institutions. An evaluation of validation must consider these costs and effects and balance them against evidence of savings from increasing the accuracy of Pell awards.

INSTITUTIONS REPORTED INCREASED VALIDATIONS, THE USE OF MORE RESOURCES, AND SOME PROBLEMS

Table 4 on page 24 shows that the 3,912 schools in our respondent population reported validating 1,220,807 applicants in 1982-83 compared to 779,720 in 1981-82.[3] In other words, these institutions reported that they validated 64 percent of their Pell grant recipients in 1982-83 but only 39 percent in 1981-82. This increase in validation activity is consistent with the Department's greatly increasing the number of applicants selected for validation in 1982-83. However, the institutions reported that they voluntarily chose to validate more applicants than the Department required, even in 1981-82.

Table 4 shows further that 32 percent of the institutions reported that they validated 100 percent of their Pell applicants in 1982-83. This is a substantial (52-percent) increase over the portion doing so in 1981-82. The Department did not require 100-percent validation in 1981-82 or 1982-83. Rather, it required schools to validate only applicants selected by the processing contractor (following the Department's criteria), and it has never required institutions to validate all applicants.[4] A substantial and increasing portion of the institutions chose nonetheless to do so.

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[3]The 3,912 institutions enrolled 76 percent of all Pell recipients in 1982-83 and constituted 74 percent of all central and independent campuses in the regular disbursement system. We excluded alternative disbursement system campuses from our survey because they do not do validations and we surveyed branch campuses in the regular disbursement system separately. Their responses did not differ substantially from those of the central and independent schools. See appendix II.

[4]The processor selects applicants individually for validation, basing the selection on characteristics of the application data and without regard for the school an applicant may attend (which is generally unknown when the student applies for aid). Thus, the actual number of validations any school must do is not planned or formally decided by the Department.

Further, even the institutions that did not validate 100 percent of their applicants reported that they validated more applicants than the Department required. Table 4 shows that 81 percent of these institutions reported that they went beyond the Department's requirements in 1982-83 and validated additional applicants whose applications appeared suspect. Twenty-two percent also reported that they validated Pell applicants who applied for other financial aid such as institutional scholarships and loans. The proportion of institutions choosing to extend validation to these two groups of applicants was also greater than in 1981-82.

Table 4

Schools' Pell Validation Activity in Program Years 1981-82, 1982-83, and 1983-84[a]

	1981-82	1982-83	1983-84[b]
Recipients			
Total number	2,009,925	1,921,359	1,607,502
Average number per school	524	501	424
Validated applicants			
Total number	779,720	1,220,807	967,524
Average number per school	208	318	252
Schools with 100-percent validation	21%	32%	32%
Schools without 100-percent validation			
Validated additional applicants with suspect data	75	81	79
Validated additional applicants who also applied for other financial aid	16	22	29
Schools validating dependency data	79	76	82
Schools validating additional data (e.g., nontaxable income)	57	62	67

[a]Data are from our national survey and are estimates for our respondent population of 3,912 central and independent schools in the regular disbursement system developed by attaching weights to survey responses.

[b]Numbers (and possibly percentages) cannot be compared with earlier years in that they represent interim data on the 1983-84 program year in progress during our survey. Schools reported validations from July 1, 1983, through October 30, 1983, and general intentions concerning validation policy for the whole year.

Finally, the institutions reported that they voluntarily chose to validate additional application items. In 1982-83, the Department required validation of only adjusted gross income and federal income taxes paid. However, 76 percent of the institutions validated application items used to decide dependency status, and 62 percent validated still other items such as nontaxable income.

The 1983-84 program year had not ended when we surveyed the institutions, but reports of 1983-84 validation activities up to the time of the survey suggest that institutions intend to continue to go beyond the Department's requirements. The portion of institutions validating 100 percent of applicants, extending validation to applicants whose applications appear suspect or who apply for other financial aid programs, and validating additional data items all continued to be above 1981-82 levels.

Resources used for validation increased

The institutions reported that they increased the resources they used for validation as validation activity increased, whether required or voluntary. This is not surprising, for more work usually means more resource demands. Validation has financial costs, and these costs have increased since 1981-82. However, on the whole, our national survey of institutions and our 12 case studies of administrative costs for financial aid found that the increase seems modest compared to the increases in validation activity.

Institutions made some staffing increases and adjustments

The chief resource required for validation is personnel. To do validation, financial aid staff compare data on various documents such as parents' or students' federal income tax returns with information on the students' applications. Since each application is unique, the activity is labor intensive, especially when there are hundreds or thousands of applicants. Staff may also have other tasks and responsibilities associated with validation, such as communicating with students to encourage them to begin the application process well in advance of the expected payment date and advising and counseling applicants undergoing validation. Hence, it is reasonable to expect staffing increases and adjustments as validation activity increases. For instance, institutions might hire more staff or reassign tasks among staff who have to handle increased work loads.

Our national survey found that some institutions made special staffing adjustments specifically in order to complete 1982-83 Pell validations, whether required or voluntary. For instance, 42 percent of the institutions reported that they

Table 5

Schools That Made Staffing Adjustments to Complete 1982-83 Pell Validations[a]

Adjustment[b]	Schools made adjustment: To any extent	Schools made adjustment: To a great or very great extent
Required staff to work unpaid overtime	42%	13%
Dropped or deferred other staff functions	39	10
Hired additional staff	12	2
Paid staff overtime	9	1

[a]Data are from our national survey and are estimates for our respondent population of 3,912 central and independent schools in the regular disbursement system developed by attaching weights to survey responses.
[b]Not exclusive categories; an institution may have made more than one adjustment.

required staff to work unpaid overtime, and 39 percent reported that they dropped or deferred other work in order to complete 1982-83 Pell validations, reducing staff contact with students, reducing other administrative or management functions, and rearranging or rescheduling work loads (see table 5).

However, not all the institutions reported making special staffing adjustments, particularly to a great or very great extent. For instance, 58 percent of the institutions did not require staff to work unpaid overtime at all, and 87 percent did not require staff to work unpaid overtime to a great or very great extent. The same pattern holds for each of the other types of special staffing adjustments shown in table 5: dropping or deferring other staff functions, hiring additional staff, and paying overtime.

Although many institutions did not make special staffing adjustments to a great or very great extent, on the average they used more staff time for 1982-83 validation, whether required or voluntary. The institutions reported on the average that they increased the time of professional staff 33 percent, student clerks 50 percent, and other staff 17 percent. In other words, across all types of staff, institutions increased the time staff spent on Pell validation by one third. Thus, in 1981-82, on the average, institutions spent 3.6 staff months solely on Pell validation, whereas in 1982-83, on the average, they spent 4.8 staff months. Staffing seems to have held steady for 1983-84. See table 6.

Table 6

Average Number of Full-Time Equivalent Staff Months Spent on Pell Validation in Program Years 1981-82, 1982-83, and 1983-84[a]

Staff	Average number of months 1981-82	1982-83	1983-84	Increase 1981-82 to 1982-83
Professional	2.4	3.2	3.0	33%
Student clerks	0.6	0.9	0.9	50
Other	0.6	0.7	0.7	17
Total	3.6	4.8	4.6	33

[a]Data are from our national survey and are estimates for our respondent population of 3,912 central and independent schools in the regular disbursement system developed by attaching weights to survey responses.

The average 33-percent increase in staff needed for validation is attributable to large changes in a few institutions. Most institutions made no changes: 74 percent made no change for professional staff, 93 percent no change for student clerks, and 94 percent no change in other staff time.

We were able to examine staff costs as well as other resource costs in greater depth at our case study schools.[5] At these 12 schools, we examined in detail the 1982-83 costs for all administration activities for all financial aid programs, including the validation of Pell grants. For 9 of the schools, we compared 1982-83 costs with 1981-82 costs.

Looking first at staff months as a measure of staff time and effort, we found that the 12 schools spent somewhat more time on 1982-83 validation than reported by the survey population. The case study schools varied greatly in the number of the staff involved in the full range of administrative tasks for all financial aid programs, not just Pell grants. Staff numbers ranged from 3.0 to 107.4 full-time equivalents in 1982-83. If we assume that a full-time equivalent staff year equals 12 full-time equivalent staff months, our 12 schools had from 36 to

[5]Case study data cannot be projected by themselves to the population of schools; all cost and resource figures from the 12 case studies are not weighted and apply only to these particular cases. Our national estimate of schools' validation costs is an approximation rather than a projection and rests not only on the case study data but also on national survey results.

1,289 staff months available for all administrative financial aid tasks. The time staff spent specifically on Pell validation in 1982-83 ranged from 1.2 to 22.8 full-time equivalent staff months, averaging 7.9. (The median and the most frequently reported number was 6.0 full-time equivalent staff months.) This is consistent with our survey findings.

At the 9 case study schools for which we had comparative data, the percentage of time staff spent on Pell validation increased somewhat between 1981-82 and 1982-83, going from 3 to 4 percent. This is a 33-percent increase, also consistent with the survey report of a 33-percent increase. Like the survey, this overall increase conceals much variation in that only 4 of the 9 schools increased time staff spent on Pell validations, and the quality of the data from 1 of the 4 schools is questionable. Of the remaining 5 schools, 4 showed no change in staff time in 1982-83 and 1 showed less time spent on Pell validations.

If we compare the number of validations performed in 1982-83 with the number the preceding year, 8 of the 9 case study schools reported a larger number of validations. If we exclude the school with questionable data, we find 7 of 8 institutions reporting validation increases. The institution that did not report increased validations had already reported 100-percent validation in 1981-82 and an increase in the number of items validated in 1982-83.

We examined the average number of total staff hours (paid and unpaid) that the case study schools required in order to complete a single Pell validation in 1982-83. Setting aside the school that far exceeded the Department's validation requirements in both years and the school with questionable staffing data, we found that the remaining 10 schools used, on the average, from 0.5 to 3.7 hours of staff time to complete a validation, averaging about 1.7 hours. The 3 schools that spent the highest average effort were all proprietary vocational schools.

In addition to looking at the actual amount of time (staff months and hours) that staff at the case study schools spent on Pell validation, we looked at the proportion of time staff spent on this task in comparison with all other financial aid tasks for all financial aid programs. As table 7 shows, staff at the 12 schools spent proportionally little time (13 percent) in 1982-83 on validation and all other need-analysis and eligibility-determination activities for <u>all</u> financial aid programs. Staff spent proportionally even less time (4 percent) on Pell grant validation alone. Further, at the 9 schools for which we had comparative data across the years, Pell validation was a relatively minor function in 1982-83, even though the proportion of time that staff spent on it increased from 3 to 4 percent (and on the average involved 7.9 staff months in 1982-83).

In sum, our national survey of institutions and our 12 case studies of financial aid administrative costs found that insti-

Table 7

Average Percent of Staff Time Spent on Financial-Aid Administrative Functions in Program Years 1981-82 and 1982-83[a]

Function	Sample: 12 schools 1982-83	Sample: 9 schools 1981-82	Sample: 9 schools 1982-83
Outreach, counseling, and receipt and distribution of applications	30%	22%	27%
Accounting and collection	21	22	22
Other (office planning, budgeting, personnel)	13	17	14
Packaging and awarding	15	17	18
Need analysis, eligibility determination, and validation for all financial-aid programs (including Pell)	13	12	12
Validation of Pell grants alone	4	3	4
Reporting and compliance	8	9	9

[a]Data are from our case studies, are not population estimates, and may not add to 100 because of rounding. (Validation of Pell grants alone must be excluded when totaling columns. It is included in the overall function of need analysis and eligibility determination for all programs and shown separately as well on the indented line.)

tutions made staffing increases and adjustments for 1982-83 validation, whether required or voluntary. However, these increases and adjustments seem modest compared to the increases in validation activity. For example, our survey found that institutions increased the proportion of Pell recipients that were validated from 39 percent in 1981-82 to 64 percent in 1982-83. Generally, they did this without making special staffing adjustments (such as requiring staff to work unpaid overtime) to a great or very great extent. On the average, they increased the time staff spent on Pell validation, whether voluntary or required, by one third. At the 9 case study schools for which we had comparative data, the increase in time staff devoted to validation also averaged one third. In both the survey and the case studies, however, some schools reported considerable increase, some no change, and a very few a decrease. Also, across all 9 schools in 1982-83, Pell grant validation continued to rank last among administrative functions for financial aid in terms of the proportion of staff time it required.

Institutions also made other resource adjustments

Staffing change is not the only approach for coping with increased Pell validation activity. Schools can take a variety of steps to increase efficiency and productivity in handling validation as well as other Pell grant processing and management tasks. For instance, they can seek training and assistance for enhancing staff knowledge, and they can automate various application-processing tasks.

Our national survey and our 12 case studies found that institutions have been using several strategies to handle increased Pell validation work loads. For instance, the 5 case study schools that did not increase or decrease the time staff spent on Pell validation in 1982-83 used more than one approach for handling the increased numbers of Pell validations. They increased automated data processing in various aspects of Pell grant administration (such as producing letters to students and tracking students through the stages of validation) and reallocated validation work from less efficient clerical or paraprofessional staff to more efficient professional staff.[6]

Our national survey found also that institutions increased automated data processing for Pell validation and other Pell grant processing and management tasks.[7] Twenty-four percent of the institutions reported that they increased the use of computers specifically in order to complete 1982-83 Pell validations. However, only 8 percent reported that they increased computer use to a great or very great extent. More generally, the institutions reported that they have steadily increased automation for several other aspects of Pell grant processing, which suggests that their general efficiency in administering Pell grants may be increasing. As table 8 shows, automation increased for all aspects of processing we asked about on our national survey. By 1983-84, 47 percent of the institutions reported that they were using computers for at least one function (maintaining recipients' records).

Institutions also sought and received special training and assistance for staff in the Department's 1982-83 Pell validation procedures. Sixty-two percent reported that they received formal workshop training from their state or regional professional

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[6]Staff time and dollar costs for automated data processing in the case study schools are included in the administrative costs for financial aid discussed in this chapter.

[7]Our survey did not ask specifically about reallocating validation work from clerical to professional staff; however, it does show that more institutions increased professional staff time for validation in 1982-83 than increased clerical staff time.

Table 8

Percent of Schools Using Automated Data Processing to Manage Pell Grants in Program Years 1981-82, 1982-83, and 1983-84[a]

Function	1981-82	1982-83	1983-84
Maintaining recipient records	34%	40%	47%
Maintaining applicant lists	22	30	36
Calculating eligibility	11	22	25
Calculating awards	12	20	23
Producing letters to applicants	10	13	16
Packaging multiple aid programs	8	12	17
Tracking documents for applicants	6	13	16

[a]Data are from our national survey and are estimates for our respondent population of 3,912 central and independent schools in the regular disbursement system developed by attaching weights to survey responses.

associations, 61 percent from the Student Financial Aid Training Project operated for the Department by NASFAA. Sixty-two percent also reported that they made contact with the Department's regional or Washington, D.C., offices, either by phone or letter, to seek help with questions about validation requirements. Of the institutions receiving training or help from these sources, 84 to 88 percent judged it adequate or more than adequate; 1 to 5 percent judged it inadequate. The remainder were neutral.

The dollar cost of validation varied but appears to have averaged about $14 per validation

Our case studies suggest that the actual dollar costs of Pell validation for staff and all other resources and the 1982-83 increases in these costs varied considerably.[8] Overall spending for Pell validation--whether required by the Department or done voluntarily--decreased at 2 of the 8 schools in this

[8]We excluded from all dollar cost calculations the school that supplied questionable data. Hence, we used 8 rather than 9 schools for our analyses of cost increases in 1982-83 and 11 schools rather than 12 for our analyses of the average cost per Pell validation in 1982-83. Further, for all comparative cost analyses, we adjusted 1982-83 dollars to remove the effects of inflation. We did not make this adjustment for our analyses of the average 1982-83 cost per validation, since no year-to-year comparisons were required.

Table 9

Overall Spending for Pell Validation in 1982-83[a]

School	Cost increase 1981-82 to 1982-83[b] Total[d]	Proportional	Cost 1982-83[c] Total	Average
Proprietary				
Less-than-2-year business	$ 998	57%	$ 3,219	$47
Less-than-2-year technical	e	e	12,435	42
2-year business	1,117	30	4,984	27
Private university[f]	6,860	201	11,025	21
Public 4-year college	e	e	16,558	17
State university	18,915	114	37,192	17
Community college	-777	-7	11,675	15
Private 4-year traditionally black college	e	e	12,534	12
State university 1	-4,068	-36	7,788	9
State university 2	3,732	25	19,938	8
Private 4-year college	500	18	3,464	8

[a]Data are from our case studies and are not population estimates.
[b]For the comparison, 1982-83 costs deflated to 1981-82 dollars.
[c]1982-83 costs not deflated for analyses of costs per validation because year-to-year comparisons were not required.
[d]Constant dollars.
[e]Data on 1981-82 costs not available because not included in the study of 1981-82 financial-aid administrative costs.
[f]Exceeds Department of Education validation requirements.

analysis. At the 6 other schools, however, overall spending increased. See table 9.

The dollar increases and the proportional increases in spending at these 6 schools varied widely, and no clear pattern of factors is associated with these increases. For example, not all the schools that increased staffing had cost increases. Conversely, some schools that did not increase staffing did have cost increases. The 2 schools with the largest dollar increases (and the largest proportional increases) were a state university that had to add staff in order to handle a much larger number of Pell validations and a private university that substantially exceeded the Department's requirements for validation in 1981-82 and 1982-83. Total dollar increases at the 4 remaining schools ranged from $500 to $3,732. The median cost increase was $1,058.

Looking next at the average cost per Pell validation, we found that (across the 11 schools in this analysis) the overall

average cost per Pell validation was $14 in 1982-83. School-level average costs per Pell validation varied considerably, ranging from $8 to $47, as table 9 shows. The median school-level average cost per Pell validation was $17. The 4 schools with the highest average costs, ranging from $21 to $47 per validation, were the 3 proprietary vocational schools and the school with a policy of doing much more intensive validation than the Department required. The schools with lower average costs per validation, from $8 to $17, included the larger 4-year colleges and universities.[9]

The cost differences between these high-cost and low-cost schools appear to reflect partly differences in validation procedures and partly differences in the size and characteristics of the student populations. For instance, the schools with lower average costs per validation generally had more extensive automation support for all administrative functions for financial aid, including validation. These institutions also performed many more validations than the high-cost schools. Hence, they may have achieved economies of scale and processing efficiencies as staff became practiced in handling validations. Further, some portion of the students being validated at the low-cost schools were returning students who may have gained experience with financial aid procedures in earlier years.

In contrast, the 3 proprietary schools that had higher validation costs had short vocational programs of 6 months to 2 years. (One of the 3 also offered 4-year vocational programs.) Thus, they had a smaller proportion of returning students (and a greater proportion of first-time applicants) in any group of aid applicants. These differences suggest that there may be limits to the cost savings that can be attained by means of processing efficiency. It may be that schools that handle comparatively few validations or that have a constant influx of new or first-time aid applicants will have higher costs per validation even when efficiencies are fully realized.

Our national survey suggests that the average cost per validation of $14 in the case study schools may be a good working estimate of a general average cost per validation. Our survey asked, "In your opinion, what would be an appropriate administrative allowance (per student) to cover the costs of the Department's current Pell grant validation requirements?" Responses ranged from $0 to $150, but 75 percent were estimates ranging from $0 to $15. The most common estimate, given by 41 percent of the respondents, was $10. The average of all responses was $15. This figure is very close to our estimate of

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[9]Our national survey data did not reveal notable differences in patterns of validation activity, resource use, attitudes toward or problems with validation, among types of schools. However, we did not examine the specific and detailed costs of Pell validation in the survey, as we did in our case studies.

$14 from the case study schools, although the question of an appropriate reimbursement is not identical to the question of actual cost.

In sum, two major points emerged from our analyses of the resources institutions used for Pell validation, whether it was validation required by the Department or undertaken voluntarily. First, the institutions increased their resource allocations for validation. For example, in response to our survey, the institutions reported that they validated 64 percent of their Pell grant recipients in 1982-83 compared to 39 percent in 1981-82. From 9 to 42 percent of the institutions reported that they made some sort of special staffing adjustment in order to complete 1982-83 validations, although only from 1 to 13 percent reported doing so to a great or very great extent. On the average, the institutions reported that they increased the time staff spent on validation by one third across all types of staff. They reported requiring 3.6 staff months for validation in 1981-82 but 4.8 staff months in 1982-83. Our case study data also show increases but suggest that Pell grant validation ranked low among all administrative functions for financial aid in terms of the proportion of staff time it required. Finally, both our survey and our case studies suggest that institutions made use of several approaches to increasing their general efficiency in administering Pell grants, such as increasing automated data processing for Pell grant management tasks, including validation, and obtaining training and assistance to increase staff knowledge.

Second, validation, whether required or voluntary, cost on the average about $14 per validation. In short, the institutions invested staff time and other resources in conducting validation, regardless of whether it was required by the Department or done voluntarily as a matter of institutional policy. Further, higher costs at certain kinds of institutions with certain kinds of students suggest that there may be limits to the cost reductions that might be accomplished, no matter how efficiently the institutions carry out their own or the Department's validation procedures.

Institutions had problems with validation but attitudes were generally positive

The institutions reported that they had some problems as a result of, and with certain aspects of, the Pell grant validation process. However, on the whole, their attitudes toward validation seemed largely positive. One of the most common problems for 1982-83 was the delay of Pell awards.[10] Ninety percent of the institutions in our national survey reported that payments to some Pell grant recipients were delayed in 1982-83

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[10]In our survey, we did not ask about 1981-82 award delays. Hence, we do not know whether delays increased in 1982-83.

specifically because of validation, whether required or voluntary. On the average, these institutions reported that awards to 17 percent of their recipients were delayed.

These payment delays had two types of consequence for institutions. First, 83 percent of the institutions whose students received delayed awards reported that they made special accommodations or adjustments in order to help the students over the delay. The institutions that chose to make accommodations reported that they most often deferred tuition or other fees until all Pell validation steps (including application corrections) were completed. They least often made partial Pell awards. Second, 26 percent of the institutions whose students received delayed awards reported that they experienced internal cash shortages when students could not pay tuition and fees on time. Although the 1983-84 award year had not ended at the time of our survey, this general pattern of delay and its consequences seemed to be holding.

The institutions reported also that for 1982-83 they had particular problems with obtaining documentation of the receipt of Social Security, veterans' benefits, and welfare payments and counseling or advising the parents of applicants going through the validation process. Sixty percent of the institutions reported that obtaining the documentation was difficult or very difficult. Forty percent reported that advising parents was difficult or very difficult.

The latter finding, that institutions had difficulty advising parents, is somewhat surprising, since validation is usually thought of as the students' responsibility. Our survey did not ask about specific difficulties in advising parents. However, several financial aid officers told us informally of difficulties that helped us interpret the survey finding. The anecdotes had a common theme: some parents tended to become puzzled and upset and to call the school when a student asked for sensitive financial documents such as federal income tax returns. This happened particularly among parents who were divorced or separated, were having financial difficulties, or had another child who had received a Pell grant without going through validation.

Institutions' problems with Pell validation may decrease as time goes on. Sixteen percent reported that they found implementation harder in 1983-84 than in 1982-83. In contrast, 35 percent of the institutions reported that they found validation easier to implement in 1983-84 than in 1982-83.

Despite the problems, the general attitude of the institutions toward validation appeared to be largely positive, although there was criticism. A positive attitude was expressed both in institutions' practices and in their survey statements about various aspects of validation. Looking at their practices, we found that the institutions voluntarily chose to

Table 10

Validation for Financial-Aid Programs Other Than Pell in Program Years 1981-82, 1982-83, and 1983-84[a]

	1981-82	1982-83	1983-84
Percent of schools validating applicants for other programs	48	58	60
Applicants other than Pell			
Total validated	693,711	1,012,515	1,144,321
Average number validated per school	181	263	297

[a]Data are from our national survey and are estimates for our respondent population of 3,912 central and independent schools in the regular disbursement system developed by attaching weights to survey responses.

Table 11

Schools' Satisfaction and Dissatisfaction with Aspects of Department of Education Pell Validation Procedures[a]

Aspect	Very satisfied or satisfied	Neither satisfied nor dissatisfied	Dissatisfied or very dissatisfied
Clarity			
Application form	64%	23%	12%
Validation handbook	61	26	14
Student-aid report instructions	49	23	29
Timeliness in distributing validation handbook	46	28	26
Consistency of rules year to year	36	33	30

[a]Data are from our national survey and are estimates for our respondent population of 3,912 central and independent schools in the regular disbursement system developed by attaching weights to survey responses.

do more Pell validation work than had been required by the Department. In addition, as table 10 shows, the institutions reported that they validated applicants for financial aid programs other than Pell and that the number of these other validations increased in 1982-83.

We found also that 69 to 87 percent of the institutions reported that they were either satisfied with or neutral about the aspects of the Pell validation procedures shown in table 11. Twelve to 30 percent expressed dissatisfaction, particularly with the clarity of the student-aid report and the consistency of the Department's validation rules from year to year.[11]

In addition, 68 percent of the institutions reported that they supported, strongly supported, or were neutral about the proposal outlined in an August 1983 letter from the Department that would have extended some form of validation to other federal aid programs, including the Guaranteed Student Loan program. Specifically, 50 percent reported that they supported or strongly supported validating data from applicants for these other aid programs, 18 percent reported that they were neutral, and 32 percent reported that they opposed or strongly opposed the expansion. In contrast, only 25 percent of the institutions reported that they supported or strongly supported the Department's proposed method for validating applicants for the programs. The method would have required that the institutions validate randomly chosen applicants, the number at each institution to be based on its own error rates as determined from an annual study. Thirty-nine percent reported that they opposed or strongly opposed this specific method, and 29 percent reported that they were neutral about it. Seven percent reported that they were not familiar with the proposal.

In sum, the institutions had problems with certain aspects of validation, whether required or voluntary. Particular problems included delayed awards, difficulty obtaining documentation of Social Security, welfare, and veterans' benefits, and advising the parents of students undergoing validation. The institutions also criticized certain aspects of the validation procedures, particularly the 1982-83 student-aid report, for lack of clarity, and the Department's validation rules, for lack of consistency from year to year. In spite of these problems and criticisms, however, the institutions were generally satisfied with or neutral about most aspects of the validation process, and they seemed willing to see some form of validation expanded to other federal financial aid programs.

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[11] After we conducted our survey, the Department substantially changed the format of the student-aid report. For 1984-85, it did not have a multipurpose single form but had three separate parts. We do not have information on institutions' reactions to the new format.

STUDENTS REPORTED SOME EFFECTS

We explored the effect of validation on students from two different perspectives. First, in our national survey, we asked institutions for their estimates of effects on students in 1982-83. Second, we asked four different groups of Pell applicants about their experiences with and reactions to the process of obtaining a Pell grant, including validation. One of the four groups consisted of applicants who had been found to have had great need for assistance and were eligible for an award in 1982-83 but had never actually received one. We surveyed these applicants in telephone interviews. The three other groups consisted of validated and unvalidated applicants who received Pell grants in 1983-84 and were students at 3 of our 12 case study schools. We surveyed these students by means of a mail questionnaire.

We selected the schools for the student surveys primarily for the different types of students they served. One school is a public, urban community college with a high proportion of minority and low-income students and a higher proportion of independent students than the 2 other schools. Another school is a private 4-year college most of whose students are and traditionally have been black. The third school is a private university with a national undergraduate and graduate student population. As a matter of policy, this school validated 100 percent of its aid applicants. It also validated more Pell grant application items than the Department required. (See appendix II for more details of the student populations and samples at these schools.)

Our design for studying the effect of validation on students differed in two important ways from our design for studying its effect on institutions. First, in studying students we did not focus on the effects of the Department's 1982-83 changes, as we did for institutions. Analyzing changes requires either baseline data that have already been collected or accurate recall of experience. We knew of no baseline data on the validation experiences of students, and it seemed highly unlikely that students would accurately remember the details of experiences that had occurred 2 or 3 years earlier. Hence, we chose to focus on students' most recent experiences.

Second, our applicant and student samples are not nationally representative, as is our institutional survey. Rather, the applicant sample was designed to provide a limited exploratory look at one particular group of 1982-83 applicants, and the three samples of 1983-84 students were designed to be representative only of the particular schools from which they were drawn.[12]

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[12]Response rates and other aspects of the various data sets must also be taken into account. We discuss these in the chapter as we present the information from each data set.

Hence, the comparison group design provides useful information on the effect of validation on students, but our results can be generalized only to the particular schools from which the student samples were drawn.

Most students seem not to have had problems with validation

The institutions and the students reported that some students had problems with certain steps of validation. However, they indicated that most of the students appeared not to have had problems or to have found it difficult to obtain a Pell grant. Further, the problems appeared not to have fallen disproportionally on particular groups of students or to have been unmanageable.

As table 12 shows, 22 to 62 percent of the institutions reported that students had difficulty with various aspects of the 1982-83 validation process. For example, 62 percent of the institutions reported that students had difficulty obtaining necessary documents from government agencies. Fifty-three

Table 12

Percent of Schools Rating Student Difficulty with 1982-83 Pell Validation Steps[a]

Validation step	Very easy or easy	Neither easy nor difficult	Difficult or very difficult	Don't know
Obtaining documents from government agencies	5%	32%	62%	1%
Understanding instructions and rules	13	34	53	0
Obtaining timely and accurate corrections from processor	25	38	36	0
Obtaining documents from parents	19	51	28	1
Obtaining assistance and information from the Department and processor	26	48	22	4

[a]Data are from our national survey and are estimates for our respondent population of 3,912 central and independent schools in the regular disbursement system developed by attaching weights to survey responses.

percent of the institutions said that students also had difficulties understanding the Department's rules and instructions for validation.

Much of our data on students are limited to the 3 case study schools, but most of the students at these institutions who received Pell grants in 1983-84 did not indicate that they had as many difficulties as the institutional reports suggest. Usually they reported that they had no difficulty providing the required information. At all 3 schools, most of the validated recipients reported that they had to provide their own or their parents' federal income tax returns. Across the 3 schools, only 7 to 13 percent said that they found this difficult. Across the 3 schools, 33 to 55 percent of the validated students reported also that they had to provide a signed statement from their parents to verify that some parts of their applications were correct. None of the community college students and less than 10 percent of the students in the traditionally black college and in the private university said that this was difficult.

Finally, across the 3 schools, from 0 to 20 percent of the validated students reported that they had to provide a variety of other documents such as official verification of Social Security, real estate appraisals, and income or benefit statements from state agencies. At the community college, 20 percent of those who had to provide real estate appraisals said that this was difficult, while 2 percent or fewer of those who had to provide documents of the other types said that this was difficult. Similarly, at the 2 other schools, 3 percent or fewer of those who had to provide real estate appraisals or other documents reported that this was difficult.

Differences between the institutions' reports of students' difficulties and students' own reports may stem from two main factors. First, our institutional survey did not ask institutions to estimate how many or what proportion of students had difficulty with the 1982-83 validation process. Probably not all students at a particular institution had difficulties. For instance, at the 62 percent of institutions reporting that students had difficulty obtaining necessary documents from government agencies, it may be that only a portion of the students had this problem. The student survey data from our 3 case study schools suggest this interpretation.

Second, it may be that 1983-84 applicants found validation easier than did 1982-83 applicants. As we discussed earlier, 35 percent of the institutions reported that they found validation easier to implement in 1983-84 than in 1982-83. Further, our institutional survey and case study data suggest that the schools may have become more efficient in handling the management and processing tasks for Pell grants (for example, by greater automation). The students may have benefited if the institutions were more efficient with validation procedures.

The availability of assistance for students undergoing validation may also have helped make the process easier. Our institutional survey data and our case study data indicate that counseling students and giving them other kinds of help is a regular function of financial aid offices (see table 7). Validated students at all three schools reported that they received help from a variety of sources, most frequently the financial aid office at the school and the application processor. Across the three schools, 49 to 63 percent of the validated students reported that they received help from a school, and 20 to 26 percent reported that they received help from the application processor. At all three schools, most of these students reported that they were satisfied with or neutral about the help they received. Only 2 to 18 percent reported that they were dissatisfied.

Several other findings from the three student surveys also support the general conclusion that most students do not find validation particularly difficult. For instance, some of the recipients at the three schools did not even recall having gone through the validation process. From 17 to 24 percent of the survey respondents whose records showed that they had been selected for validation did not recall having to provide documentation to verify information on their applications. In other words, they did not recall being validated. This suggests that for these students, at least, validation was neither a particularly important nor a particularly onerous requirement.[13]

It could be argued that the students' lack of awareness of the validation process is evidence that students cannot make valid assessments of the Pell award process. We believe that the students would have been much more likely to recall it if it had been onerous. In addition, most of our questions about validation were asked only of students who reported having been validated. Ignoring students who were validated but not aware of it presumably has the effect of inflating the students' reports of difficulty with validation. (This is because students who were validated but did not recall the experience were not asked how difficult validation was. Presumably, they would have reported minimal difficulty.) In brief, even the modest validation difficulties the students reported are probably somewhat inflated, given the exclusion of validated students who did not recall being validated.

Finally, very few students, regardless of their validation status, reported that they found it difficult or very difficult

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[13]There is other evidence that students do not recall validation. The Department's study of errors in 1982-83 found that only about one fourth of the students who were sampled recalled having been selected for validation, whereas 60 percent had been selected.

Table 13

Percent of Recipients Rating Difficulty of Obtaining Pell Grants at Three Schools in 1983-84[a]

Recipients	Easy or very easy			Difficult or very difficult		
	Public community college	Private 4-year black	Private University	Public community college	Private 4-year black	Private University
All	43%	41%	46%	0%	5%	11%
Validated	46	39	49	0	7	13
Nonvalidated[b]	37	43	33	0	1	7

[a]Data are from our survey of students and are estimates for our respondent population of 788 community college students, 848 students at a traditionally black college, and 248 private university students developed by attaching weights to survey responses.

[b]All applicants at the private university were to be validated, according to school policy, but a portion of the students denied having been required to provide documents, and we classified them "nonvalidated" for this table. We also placed students in the community college and traditionally black college in this category if they did not recall having been validated. Thus, comparisons within these schools are conservative because some problems recalled by the "nonvalidated" students might have been validation problems. Comparisons within the private university, a 100-percent validated school, provide information on recall effects.

to obtain a Pell grant. None of the community college students said that they found it difficult, as table 13 shows. At the traditionally black college, only 1 percent of the nonvalidated students and 7 percent of the validated students said that they found it difficult. The portion of students who reported difficulty is higher at the private university, where 7 percent of the nonvalidated students and 13 percent of the validated students said that it was difficult or very difficult to obtain a Pell grant. However, as a matter of institutional policy, the private university validated more application items than the two other schools.

Table 14

Percent of Recipients Who Changed Application Data at Three Schools in 1983-84[a]

Recipients changing data	Public community college	Private 4-year black	Private University
All	30%	22%	43%
Validated	35	24	44
Nonvalidated[b]	21	18	41

[a]Data are from our survey of students and are estimates for our respondent population of 788 community college students, 848 students at a traditionally black college, and 248 private university students developed by attaching weights to survey responses.

[b]All applicants at the private university were to be validated, according to school policy, but a portion of the students denied having been required to provide documents, and we classified them "nonvalidated" for this table. We also placed students in the community college and traditionally black college in this category if they did not recall having been validated. Thus, comparisons within these schools are conservative because some problems recalled by the "nonvalidated" students might have been validation problems. Comparisons within the private university, a 100-percent validated school, provide information on recall effects.

Table 14 shows that validation was associated with application changes, even though it did not always cause students to make application changes and was not the only cause of application changes. At the public community college, for example, 35 percent of the validated recipients changed their applications, as contrasted with 21 percent of the nonvalidated

recipients. Both validated and nonvalidated students gave a variety of reasons for making application changes, ranging from correcting name spellings to correcting income information. The latter was the most common reason given by validated and nonvalidated students alike.

Validation problems and delays in awards caused some students to make academic and financial changes

The question of whether or not validation affects students' academic plans is difficult to answer conclusively for several reasons. First, the question is tangled. Is it that validation affects their plans or that it causes award delays, which in turn affect their plans? Second, validation difficulties and award delays do not necessarily discredit the validation process. Students and parents who are late in submitting and correcting applications may create validation problems more than the application processor or school officials do in processing and reviewing applications. Third, many personal factors influence students' academic decisions. Even at a moment of decision, it is very difficult for a student (or anyone else) to sort through all the factors and say which had the greatest influence. Fourth, it is impossible to gather absolutely reliable information on this complex topic from either the students or other informants. Students may not fully recall their reasons for making a particular academic decision, and the institutions probably never have complete information about why students make particular choices.

With these complexities in mind, we examined validation's effects on students' academic plans in several ways. We asked institutions to estimate how much 1982-83 validation affected students' academic plans. We asked 1982-83 applicants who were greatly in need of and eligible for Pell awards but did not receive one whether or not problems with validation had been a factor in their failure to receive Pell funds. Finally, we asked the students at our three case study schools about the consequences of delays in their awards. Each of these data sets has its limitations and must be interpreted cautiously.

Overall, reports from the institutions and the 1982-83 applicants suggest that validation problems did affect the academic plans of some students, causing some, for example, to delay enrollment until the next term or to change enrollment from full-time to part-time. These effects are reported for an estimated 60,616 students nationally, or about 5 percent of those who were validated. However, the plans of most students and applicants were not affected by problems with validation. Reports from the students at our three case study schools are consistent with the national survey and suggest that award delays (regardless of their cause) were consequential for some students, but most students were not affected.

Table 15

Schools Reporting Student Changes in Academic Plans Because of Problems with Pell Validation in 1982-83[a]

Change	% of schools	Total number of students making change
Delayed enrollment		
To next term	33	23,984
To later in the term	20	14,410
Enrolled in another school	14	11,234
Reduced full-time enrollment to part-time	14	10,988

[a]Data are from our national survey and are estimates for our respondent population of 3,912 central and independent schools in the regular disbursement system developed by attaching weights to survey responses.

Table 15 shows that 14 to 33 percent of the institutions in our national survey reported that students made some change in their academic plans in 1982-83 because of problems with validation. These institutions reported that students who were affected generally delayed their enrollment, for example, postponing enrollment until later in the term or until the next term. The number of students estimated to have made changes is modest compared to the total number of validated Pell grant recipients attending the institutions in 1982-83. For example, the institutions estimated that 23,984, or about 2 percent of the 1,220,807 recipients that they validated in 1982-83, postponed enrollment until the next term because of problems with validation. Similarly, the institutions estimated that about 1 percent of the 1982-83 recipients whom they validated delayed enrollment until later in the term and that less than 1 percent changed from full-time to part-time enrollment or enrolled in another school.

We did not attempt to evaluate the reasons for problems with validation. Therefore, whether a delay was caused by school officials, the processing contractor, the student, or the student's parents and others cannot be decisively concluded. Students' changing their academic plans because they had to take time to change incorrect information they initially submitted is, of course, their responsibility, not an "unfair" by-product of the validation process.

We examined the question of whether students were potentially lost to postsecondary education because validation

deterred them. Our data suggest that most of the applicants were not deterred, although some might have been. For example, 22 percent of the institutions in our national survey reported that potential students were lost to them in 1982-83 because of problems with validation, estimating the number at 8,526 students.[14] This is less than 1 percent of the 1,220,807 validated Pell recipients enrolled by our population of institutions in 1982-83.

Reports from our telephone interviews with 1982-83 applicants who were greatly in need of aid and found eligible for but did not receive a Pell award also suggest that validation problems may deter a few students but that most are not affected.[15] The 42 respondents gave a variety of reasons for not receiving the Pell grants for which they were eligible but did not generally include problems with validation among them. Twenty-two of the 42 said that they did not receive a Pell grant because they changed their minds about enrolling in school, and 21 said this was not because of validation but for family or personal reasons or because they preferred to work full-time. Only 1 of the 22 applicants linked the decision neither to accept a grant nor to enroll to difficulties with validation.

Six of the remaining 20 respondents said that they enrolled in school but, discovering they did not need a Pell grant, did not take the award. They received other aid or used their own money. This left 14 respondents, who gave other reasons for not receiving a Pell award. These included losing their applications, enrolling for fewer than the minimum hours required, and having communication problems with the schools or the application processor, such as receiving a late notification of eligibility. Only 1 of the 14 did not receive an award because of difficulty

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[14]As with all institutional reports about students, these findings must be viewed with caution, because institutions probably do not have fully accurate knowledge of students' actions, particularly students who did not enroll. For example, it may be that students decided to enroll in an institution without informing the institutions to which they had originally applied. Similarly, it may be that students who did not enroll in 1982-83 were not lost to postsecondary education because they enrolled in 1983-84.

[15]These findings also must be viewed with caution, for two reasons. First, our survey was designed to provide exploratory information, not firm conclusions or numerical estimates, about the population in question. Second, we had great difficulty in locating individuals to interview, because the Department's mailing addresses for the applicants were 2 years old. We sampled 2,000 applicants, but after repeated attempts to locate 1,084 of them yielded only 42 completed interviews, we terminated the survey.

with validation. In short, only 2 applicants of the 42 we interviewed linked problems with validation to not receiving a Pell grant in 1982-83 and, therefore, not enrolling in school.

With regard to delay, students at the three case study schools reported that their awards were delayed, but as we show in table 16, validation was not the only cause. For example, 8 percent of the nonvalidated recipients at the community college and 13 percent at the traditionally black institution reported delayed awards. Validated and nonvalidated recipients listed a variety of reasons for delays, including the late submission of their applications, the time taken by schools to review the applications, and the time taken by the application processor to make corrections. However, validation is clearly associated with the likelihood of delay. At the traditionally black institution, for example, 38 percent of the validated recipients but only 13 percent of nonvalidated recipients reported delayed awards.

Award delays often affect academic plans. For instance, some of the recipients whose awards were delayed, regardless of

Table 16

Percent of Recipients Whose Pell Grants Were Delayed at Three Schools in 1983-84[a]

Recipients with delay	Public community college	Private 4-year black	Private University
All	22%	29%	33%
Validated	30	38	38
Nonvalidated[b]	8	13	19

[a]Data are from our survey of schools and are estimates for our respondent population of 788 community college students, 848 students at a traditionally black college, and 248 private university students developed by attaching weights to survey responses.

[b]All applicants at the private university were to be validated, according to school policy, but a portion of the students denied having been required to provide documents, and we classified them "nonvalidated" for this table. We also placed students in the community college and traditionally black college in this category if they did not recall having been validated. Thus, comparisons within these schools are conservative because some problems recalled by the "nonvalidated" students might have been validation problems. Comparisons within the private university, a 100-percent validated school, provide information on recall effects.

Table 17

Percent of Recipients with Academic and Financial Consequences from Delayed Pell Grants in Three Schools in 1983-84[a]

Recipients with consequences	Public community college	Private 4-year black	Private University
All with grants delayed	22%	29%	33%
Changed academic course loads, schedules, etc.	28	8	15
Borrowed money, made budget cuts, etc.	53	84	66

[a]Data are from our survey of students and are estimates for our respondent populations of 788 community college students, 848 students at a traditionally black college, and 248 private university students developed by attaching weights to survey responses.

the reasons, reported that the consequences were negative. The consequences were more commonly financial, such as having to borrow money, than academic. Across all three schools, 8 to 28 percent of the recipients whose awards were delayed reported that they experienced academic consequences, but 53 to 84 percent reported that they experienced short-term financial consequences (see table 17). The academic problems reported were primarily having to change course loads or schedules or having to enroll part-time instead of full-time as planned. The financial problems were primarily having to borrow money or to make budget cuts until an award arrived.

In summary, our national survey of institutions suggests that in 1982-83, validation problems affected some students' academic plans--for example, 5 percent of the recipients validated by our population of institutions made some change in enrollment status--but did not affect the plans of most. Reports from our student surveys and applicant interviews were consistent with the national survey. The student data suggest that being selected for validation was associated with delays in receiving awards, although nonvalidated students also reported delays. About a third of the students who were validated reported delays, compared to about a tenth of the nonvalidated students. The data also suggest that awards delayed for whatever reason were associated with both academic and financial adjustments for some students. About one sixth of the students who reported delays in receiving awards also reported academic changes such as enrolling in fewer courses, while about two thirds reported financial adjustments such as borrowing money. Most of the validated students seem not to have experienced

either academic or financial consequences from delayed awards. A small proportion, however, may have had to delay enrollment or leave school, and some may have had short-term academic or financial problems.

SUMMARY

Testimony and correspondence from NASFAA to the Congress about a proposal to expand the validation of Pell grant applications for 1982-83 predicted effects more negative than positive. Two concerns were paramount. The first was that expansion would mean more work for already busy financial aid staff in postsecondary institutions. The second concern was that students would find it very difficult to provide required documentation and that their Pell grants would be delayed. There was even concern that delays and documentation demands would be so burdensome as to deter many students from enrolling in school at all.

To explore these predictions, we sought to estimate the effects on the schools of the Department's changes in validation requirements from 1981-82 to 1982-83 and to describe the students' recent experiences with validation. Our data from students provide useful information about the effects of validation but are not nationally representative.

We found evidence that the Department's expanded 1982-83 validation procedures increased work loads for all types of institutions. For instance, institutions reported that they increased the proportion of Pell recipients that they validated from 39 percent in 1981-82 to 64 percent in 1982-83. However, some of this increase was voluntary: many institutions chose to go beyond the Department's requirements and validate more applicants and application items than it required.

As validation activity increased, institutions allocated more resources for validation. On the average, they reported that they increased the time staff spent on validation by one third for all types of staff. Compared to the increase in validation activity, however, the resource increases seem modest. For instance, only 1 to 13 percent of the institutions reported that to complete 1982-83 Pell validations, they made some sort of special staffing adjustment (such as requiring staff to work unpaid overtime) to a great or very great extent. Pell grant validation still appears to rank low among all administrative functions for financial aid in terms of the proportion of staff time it required. Institutions seem to have used several approaches for increasing their general efficiency in administering Pell grants, such as increasing the automation of Pell grant processing and management tasks, including validation, and obtaining training and assistance to increase staff knowledge.

We estimate from our case studies that the institutions' average cost of validating Pell grant applications was $14 per

validation. We noted in chapter 1 that the Department reimbursed the institutions $5 per recipient for all administrative costs, including validation. The pattern of higher validation costs in proprietary schools (possibly because of their short vocational programs and greater proportion of first-time applicants) suggests that there may be limits to the savings from efficiency in processing.

The institutions seem to have positive attitudes about the need for validation, although there are some problems and some dissatisfaction with certain aspects of validation procedures. For example, institutions reported that awards are delayed and that they have problems in obtaining documentation of Social Security, veterans', and welfare benefits and in advising the parents of students undergoing validation. Institutions also particularly criticized the 1982-83 student-aid report for lack of clarity and the Department's validation rules for inconsistency from year to year. In spite of these problems, however, the institutions report that they are generally satisfied with or neutral about most aspects of the validation process and that they are willing to see some form of validation expanded to other federal financial aid programs.

Similarly, we found evidence that most validated students have not experienced difficulties with the process. The institutions reported that some students do have difficulties with certain steps of validation, such as obtaining documents from government agencies and understanding the Department's instructions for validation. Also, more validated than nonvalidated students in our three case study schools reported making changes in their Pell grant applications. However, students at these schools did not have as many difficulties as reports from the institutions might suggest. For instance, validated recipients at these three schools generally reported that they had no difficulty providing the required information. Further, very few recipients at these three schools (regardless of their validation status) reported that they found it difficult or very difficult to obtain a Pell grant.

Validation problems and delays in awards seem to affect some students' academic plans, although the majority of the students seem not to be affected. For instance, institutions reported that, in 1982-83, about 1 to 2 percent of their validated recipients made changes such as deferring enrollment to the next term because of problems with validation. About 5 percent in total may have had this type of experience. Our data also suggest that most applicants selected for validation are not deterred from higher education by validation problems but that some may be.

With regard to other problems, our student surveys at the case study schools suggest that awards to validated students are more likely to be delayed: about one third of the validated students but about one tenth of the nonvalidated students

reported award delays. About one sixth of the students who reported award delays for any reason also reported changing academic plans (for example, reducing the number of courses in which they enrolled), and about two thirds reported having to make financial adjustments (such as borrowing money).

Although our data are not nationally representative, most validated students seem not to make major changes in academic plans or experience other problems. With almost two million students being validated, a small percentage can, of course, involve several thousand students. However, we did not find evidence of effects as widespread and severe for students or institutions as might have been expected from the size of the validation effort required.

Our understanding of the generally quite moderate costs and effects associated with validation should be placed in context. Validation is only one possible solution to the problem of award inaccuracies. It could be argued that the costs and burdens of validation are necessary and that the modest burdens we found are reasonable, especially if one assumes that the applicants made errors that ultimately led to many of the effects on students that we observed. A deeper question--whether validation is the right remedy for the problem of error--involves issues such as prevention versus correction and alternative strategies for validation, which we explore in later chapters. In the next chapter, we assess the success of validation as implemented by the Department and the educational institutions in curbing Pell award errors.

CHAPTER 3

INACCURATE AWARDS CONTINUE, AND DATA ABOUT ERROR HAVE SHORTCOMINGS FOR GUIDING IMPROVEMENTS

Given our finding that the present validation process does impose some costs and burdens, as described in chapter 2, it is important to ask if these are balanced by reductions in award error. Finding that they are would not only help justify the costs of validation but would also suggest the appropriateness of validation as a way of reducing error. We used the Department's two most recent studies of Pell awards to compare the extent of errors in 1982-83, the year of the major expansion of validation, with error rates in 1980-81.

TYPES OF ERROR AND THEIR SOURCES

The Department has no regular or routine process of sampling Pell awards and analyzing errors. The Department has, however, recently conducted two studies of Pell grants.[1] Each study used a national sample of about 4,000 awards, from which the Department estimated the proportion of inaccurate Pell grants and the dollars awarded in error. Errors were identified by comparing reported data that were used in making awards with the "best value" for each of the same data items. These reported data were figures from the students and their parents that were used to calculate the eligibility index and figures on costs and enrollment status that were used by school officials to calculate the awards.

The Department determined each "best value" from student and parent interviews, certified copies of federal income tax returns from the Internal Revenue Service, bank and property tax records, and school records showing data used in calculations performed by school officials. The Department also looked to see whether the required documents were in each award file.

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[1]The Department has done three studies of the accuracy of Pell grants, in 1978-79, 1980-81, and 1982-83. Results from the first two are shown in table 2 in chapter 1. In this chapter, we do not discuss the earliest study because it is difficult to compare in detail to the two more recent studies, which reflect substantial changes in the Pell program after 1978 and differ significantly from the first study in methodology. See Quality in the Pell Grant Delivery System, vol. 1, Findings (Reston, Va.: Advanced Technology, 1984); Quality in the Basic Grant Delivery System, vol. 1, Findings (McLean, Va.: Advanced Technology, 1982); and Michael T. Errecart et al., Basic Educational Opportunity Grant Quality Control Study, vol. 1, Findings and Recommendations (Silver Spring, Md.: Macro Systems, 1979).

Comparing reported data with the "best value" showed the frequency of error for each item or group of items. To find the payment consequences of each error, the Department compared an award that was based on the reported data with what the student would have received if the error had been corrected by using the "best value." The Department attempted only to verify reported data; the study methods did not include searching for information omitted by applicants, such as undisclosed income or assets.

Inaccurate Pell grants can be overawards and underawards. An overaward is an award that is either larger than it should be or granted to a student who is not eligible for any grant. An underaward is an award that is not as large as it should be or the denial of a grant to a student who is eligible for it. The Department's studies of error did not try to find applicants who were eligible but through error received no award. Thus, the reported data on underawards include estimates only of the extent to which actual recipients received grants that were not as large as they should have been.

To describe sources of error, the Department combined data on accuracy at every step of the Pell grant process into two broad categories called "student error" and "institutional error." Both can result in either underawards or overawards. "Student error" is application error. It includes, for example, the incorrect reporting of a student's status as a dependent and incorrect figures for income or household size. The overall amount of student error in an award is the difference between the award the student should have received if all the best values had been used at every step and the award calculated from the original application data and the correct institutional data. This procedure isolates the effect of incorrect application data.

Institutional error includes a broad range of problems reflecting the numerous tasks carried out by institutions after a student presents a student-aid report for payment. The components of institutional error shown in the Department's studies include an incorrect determination of the student's eligibility or enrollment status (full-time or part-time), an incorrect calculation or disbursement of the award; the use of incorrect figures on the cost of attending the institution, and the absence of documents required by the Department's rules. (In cases in which documents were missing, the Department considered that the entire amount of an award was in error, although supplementary analyses disregarded the omission of documents and considered the individual eligible.) Institutional error in an award is the difference beteen a student's award and the amount the student should have received had the award been calculated from the eligibility index in the school's files and correct institutional data.

For both student and institutional error, no information is available on whether inaccuracies were intentional (which could imply fraud or abuse) or unintentional. Unintentional error can

come from the misinterpretation of a question. Items requiring forecasts of family circumstances months in the future may also be particularly subject to unintentional error. Throughout this report, we use "error" and "inaccuracy" synonymously.

We evaluated the Department's Pell error research that had used the procedures described above. We found that the aggregate estimates of the incidence of error throughout the program, and the payment consequences of the various kinds of error, were useful, within the assumptions and study design limitations of the Department's work. (Detailed results of our evaluation of the Department's studies are presented later in this chapter.) The Department acknowledges some reasons why its estimates could be incomplete or inaccurate. These include not only the lack of any direct estimate of errors of omission on the applications or errors of denial of eligibility, as noted above, but also the fact that the data were gathered while a program year was still in progress, before files and records were final, which might mean that some self-correction by institutions was not recognized. Thus, when the data are used, the possibility of some inaccuracy in the estimates should be recognized. Nonetheless, the data are adequate for examining the appropriateness of the validation process as a remedy for the types of error observed.

FINDINGS FROM THE STUDIES OF PELL GRANT ERROR

In the 1980-81 study, the Department found that 71 percent of the Pell grant recipients were awarded grants in error by at least $2 and that the estimated total of both underaward and overaward errors was $681 million.[2] Fifty percent of the recipients received overawards and 21 percent received underawards, although the dollar amount overawarded exceeded the amount underawarded by more than 4 to 1. Student error was present in 38 percent of the awards, institutional error in 42 percent.[3]

When the results of the 1980-81 study were reviewed in 1981, the Department focused its action on student error, which

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[2]For these comparisons, we used the most stringent criteria: allowing a $2 error tolerance and considering an entire award as an overpayment if any required document was missing from the award file. Thus, our error figures for 1980-81 are higher than those given in table 2. Later in the chapter, we report an analysis using the least stringent criteria: allowing a $100 error tolerance and ignoring missing documents.

[3]Since both student and institutional error could have occurred on any one application, the percentage of recipients with at least one error of either type is less than the sum of the percentage of recipients whose applications had at least one student error and the percentage of recipients whose applications had at least one institutional error.

Table 18

Absolute Error in 1982-83 Pell Grants[a]

Source	Programwide estimates: Total error (million)	Programwide estimates: Error as % of all $ awarded[b]	Programwide estimates: Recipients with error	Programwide estimates: Mean error/ recipient with error
Institutions	$321	13%	33.5%	$379
Students	328	14	39.4	328
Total	$649	27%	62.7%	$408

[a]Data are from the Department of Education and include all overawards and underawards added together, without allowing them to offset each other within a single case or in the aggregate. Error is defined as a discrepancy of plus or minus $2 from the best award.
[b]1982-83 Pell awards totaled $2.4 billion.

chiefly resulted in overawards. (The 38 percent of awards with student error included 29 percent with overawards and 9 percent with underawards.) In a corrective action, the Department expanded validation for 1982-83 so that it would include many more students, although it required the verification of fewer application items by campus officials than in previous years (discussed in chapter 2). Institutional error, which included overwards to 26 percent of recipients and underawards to 16 percent, appears to have been given no additional attention beyond the Department's usual attention to institutional compliance with program rules and the provision of voluntary training programs for school financial aid officials.

The Department's study of 1982-83 Pell grants found a continuing problem of substantial error, despite the increase in validation activity. The total absolute error (overawards plus underawards) was high in 1982-83, essentially showing only a small decrease from the error in 1980-81. In 1982-83, the estimated total absolute error was $649 million. This amount is the equivalent of about 27 percent of the $2.4 billion awarded in Pell grants in 1982-83.

On some indicators, there were some improvements from 1980-81 to 1982-83. Table 18 shows that the awards of an estimated 63 percent of all recipients were in error by $2 or more in 1982-83, down from the figure of 71 percent in 1980-81. The size of the average error per recipient also decreased between 1980-81 and 1982-83. Although numerous technical issues make comparisons across the studies difficult to interpret, the comparison of percentages and averages (such as we have reported in this paragraph) may be more meaningful than other statistics.

THE SIZE AND DIRECTION OF INACCURATE AWARDS

The Department's 1982-83 data show that an estimated 41.5 percent of the recipients were given awards that were too large and that 21.2 percent were given too little money. Overawards, on the average, were larger ($444) than underawards ($259). Some of the overawards and underawards were substantial. For example, 14.1 percent of all the recipients, or an estimated 360,000 students, received more than $550 more than they should have, while 3.8 percent, or 96,000 students, received more than $550 less than they should have. Counted among the 41.5 percent who received overawards are the 29.8 percent of all recipients who were eligible for an award of some amount. However, 11.7 percent of all the recipients, or approximately 300,000 students, should have received no award. More than half of all the funds that were overawarded went to students who were ineligible. According to the Department's estimates from its study results, 10 percent of the Pell program funds went to students who were ineligible for awards.

STUDENT ERROR

As shown in table 19, student error in 1982-83 resulted primarily in overawards. It was much the same in 1980-81. Only 9 percent of the 1982-83 awards contained student error resulting in underawards, while 31 percent of awards had student error leading to overawards. The total absolute student error was $328 million. Overall, student error, which was present in 39 percent of the 1982-83 awards, persisted; in 1980-81, student error was present in 38 percent of the awards.

The Department examined the extent of error in individual items and groups of items on the applications. As shown in

Table 19

Student Error in 1982-83 Pell Grants[a]

	Programwide estimates			
Error	Total error (million)	Error as % of all $ awarded[b]	Recipients with error	Mean error/ recipient with error
Underawards	-$ 55	2%	8.8%	-$ 249
Overawards	272	11	30.6	351
Total	$328	14%	39.4%	$ 328

[a]Data are from the Department of Education. Error is defined as a discrepancy of plus or minus $2 from the best award. Totals may not add because of rounding.
[b]1982-83 Pell awards totaled $2.4 billion.

table 20, the largest overaward amounts resulted from applicants' improperly identifying their status as dependents (they were chiefly dependent students who applied improperly as independent) and from incorrect reports of nontaxable income. The largest sources of underawards were dependent applicants' incorrect reports of assets and home equity. The Department did not require the validation of any of these four application items in 1982-83.

Table 20

Frequency and Aggregate Dollar Effect of Errors in Nine Pell Application Items in 1982-83[a]

Item in error	Recipients with error	Estimated error (million)[b] Overawards	Underawards	Net
Dependency status[c]	5.5%	$64	$ 0	$64
Other nontaxable income[d]	10.0	46	0	46
Household size	10.1	44	10	34
Number in post-secondary schools	5.9	32	9	24
Home equity	6.5	34	16	18
Assets of dependent students	18.0	39	22	17
Adjusted gross income of parents and independent students	4.0	26	11	16
Income of dependent students	1.5	13	1	12
Taxes paid	3.2	6	4	2

[a]Data are from the Department of Education. The nine errors rank highest in the Department's findings of estimated net dollars awarded in error. Error is defined as a discrepancy of plus or minus $2 from the best award, except for dependency status.

[b]Totals may not add because of rounding.

[c]Of the 5.5 percent of recipients whose dependency status was incorrect, 5.1 percent were dependents applying as independent. There were payment consequences for only 3.6 percent; the other 1.5 percent had no error even after correction, mostly because they were eligible for the maximum grant in either case.

[d]The application calls for a worksheet calculation of many possible sources of income and the transfer of the total to the application form. The kinds of income inaccurately included most often in the composite were untaxed unemployment benefits, child support, other welfare, and noneducational veterans' benefits.

Validation may have been successful in correcting some misreporting of one of the two items validated in 1982-83, adjusted gross income. Net error in this item decreased from $38 million in 1980-81 to $16 million in 1982-83 (for savings of about $22 million). Table 20 shows that the item ranked seventh in net dollar error among other sources of inaccuracy in the applications. In 1980-81, it ranked third.

The application item calling for the amount of federal income taxes paid has been overall a small component of student error, although the Department required that it be validated in 1982-83. In 1980-81, it ranked twelfth among other sources of inaccuracy in the applications, and net error in the item was less than $1 million. The 1982-83 data show that after validation increased, the net error increased slightly in size and in overall importance; it ranked ninth among the sources of error, with net error totaling $2 million.

In short, the Department has focused on student overawards. Two items, one ranked high and one ranked relatively low, were selected for validation in 1982-83, and more students were required to bring supporting documents for these items to their schools. The data show that net error in adjusted gross income did go down in 1982-83, the year of expanded verification. However, the second item, net error in federal income taxes paid, was small in both years but increased somewhat in 1982-83. Other application items not included in the Department's verification requirements show sizable error rates, and several items showed increased frequency of error between 1980-81 and 1982-83.

APPLICATION ITEMS INHERENTLY PRONE TO ERROR

Not all the inaccuracies categorized as student error in table 20 result from clear-cut errors that could be avoided by students and parents in completing the original application. Some error discovered by comparing data on applications filed in 1982 with "best values" developed by the Department researchers in 1983 included the failure to use data that were correct and available when an application was filled out. An example of this type of error is the submission of a bank balance that differed from the figure shown on official bank records. The applicant could have found out the correct figure and used it on the application.

Another type of error may have resulted, however, from items that had to be completed with separate worksheets. The item called "other nontaxable income"--one of the four items with the highest rates of application error--illustrates this type of error and the difficulty of measuring it. The item required the applicant's addition of up to 11 separate types of income such as child support received and untaxed portions of unemployment insurance. There was no room on the application form to show every component, but a worksheet was provided in

the application instruction package. The multistep process applicants followed in collecting the separate dollar figures, adding them, and transferring the total increased the chances of error. And since the worksheet was not submitted with the application, the original figures were not available for verification, if this were called for, or the Department's error research. An indirect method was used to estimate error in this item.

A third type of error is very different from the one just described. Three of the four greatest application errors were in items for which applicants had to estimate data for a future period. A year or more after the applications were submitted, the Department's research found that these estimates were often wrong. For example, to determine an applicant's status as a dependent, the 1982-83 application asked three questions about the extent of support received from parents in 1981 and repeated the same questions for 1982, the calendar year not yet ended at the time of most applications. One of the three questions asked applicants to say whether they would be claimed as dependents on their parents' federal income tax returns for 1982, which did not have to be submitted until April 15, 1983. Applicants who made errors in the item on status as a dependent were found most often in error in the three prospective items. Similarly, items on the 1982-83 application form concerning household size and number of household members in postsecondary education asked for estimates of these figures for the period July 1, 1982, through June 30, 1983. Thus, an applicant submitting the Pell grant application early in 1982, for example, would have been making an estimate of household characteristics for a period as long as 17 or 18 months in the future.

In sum, the overall category of student error includes several different kinds of error. Some error stems from failure to use correct data, even though they were available at the time of application. Other error, more difficult to measure, can be traced to complex worksheets, which may be inherently prone to error. A third type of error, forecast error, may also result from items inherently prone to error and may be the least amenable to correction. Applicants projecting 17 or 18 months into the future may not be able to be 100-percent accurate.

INSTITUTIONAL ERROR

Institutional error in 1982-83 is shown in table 21 on page 60. About two thirds of the total institutional absolute error consisted of overawards. Somewhat more Pell grants with institutional error were underawards (18 percent) than overawards (16 percent), but the overawards resulted in greater dollar error. Institutional errors decreased after 1980-81, when they were present in 42 percent of the awards, to about 34 percent.

The major source of reduction in institutional error was a decrease in the absence from school files of a student pledge

Table 21

Institutional Error in 1982-83 Pell Grants[a]

Error	Programwide estimates: Total error (million)	Programwide estimates: Error as % of all $ awarded[b]	Recipients with error	Mean error/ recipient with error
Underawards	-$111	5%	17.8%	-$247
Overawards	210	9	15.7	528
Total	$321	13%	33.5%	$379

[a]Data are from Department of Education. Error is defined as a discrepancy of plus or minus $2 from the best award. Totals may not add because of rounding.
[b]1982-83 Pell awards totaled $2.4 billion.

Table 22

Frequency and Aggregate Dollar Effect of Four Institutional Pell Errors in 1982-83[a]

Error	Recipients with error	Estimated error (million)[b]: Overawards	Underawards	Net
Missing financial-aid transcript	3.2%	$95	$ 0	$95
Incorrect				
Determination of enrollment status	22.3	54	94	-39[c]
Calculation or disbursement of award	12.3	40	16	24
Determination of cost of attendance	10.8	14	35	-21[c]

[a]Data are from Department of Education. Error is defined as a discrepancy of plus or minus $2 from the best award.
[b]Totals may not add because of rounding.
[c]Net underaward.

required by the Department, called a statement of educational purpose; the error declined by 89 percent from 1980-81 to 1982-83 and is attributable to the Department's consolidation of forms. In 1980-81, an institutional error was counted if the statement of educational purpose that had been signed by a Pell applicant was missing from an institution's files. In 1982-83, this separate form was eliminated and the statement was incorporated into the student-aid report form (which a student had to sign in order

to receive an award), thus reducing the measured error. There is no reason to believe, however, that a student's adherence to the prescribed and sworn behavior--that is, to use the Pell grant only for educational purposes--would be more likely in either of these procedures. Put another way, the reduction of error is not necessarily associated with any cost savings. In any event, institutional error remained substantial. At $321 million, absolute institutional error constituted nearly half of the absolute total error in 1982-83 Pell grants.

As shown in table 22, there were four different kinds of institutional error. Although it was infrequent, not having a recipient's financial aid transcript on file was a major source of overaward errors (since the entire amount of an award for which documents were missing was considered an error). The three other sources of institutional error were more frequent than all but one of the nine greatest sources of student error and they were associated with both overawards and underawards. The incorrect determination of enrollment status (full- or part-time) caused the largest total dollar amount of underawards.

ERROR RATES WITH LESS STRINGENT DEFINITIONS

The Department has no official definition of "accurate Pell grant award." The Department's two most recent research studies reporting error data used different definitions of accuracy. The 1980-81 study reported as errors awards beyond a $2 tolerance level. That is, an award was considered accurate if it was within $2 of the correct figure calculated with the best data available from the research. The 1982-83 study reported as errors awards beyond several tolerance levels from $2 to $100. Both studies also presented supplementary calculations of error rates, treating as eligible the recipients whose files did not contain every required document.

To test the sensitivity of the Pell grant error estimates to these two aspects of the definition of accuracy, we asked the Department to recalculate the figures shown in tables 18, 19, and 21 with a less stringent definition than any used in the Department's reports. This alternative definition considered as eligible students from whose files documents were missing (although they may have had other kinds of error that were not counted before), and the definition considered awards accurate if they were within $100 rather than $2 of the amount calculated from best values. Expressed in terms of the average Pell grant of $959 for 1982-83, the $100 and $2 error tolerances represent an allowable degree of error of about 10 percent and less than 1 percent, respectively.

Using the less stringent definition of error reduced the proportion of recipients in error from 62.7 to 40.4 percent. (See appendix III for the complete recalculated tables.) The 40.4 percent of cases with error under the revised definition

consisted of 27.1 percent of all recipients who received overawards and 13.3 percent with underawards. The estimate of absolute error for the entire program for 1982-83 under the most stringent definition was $649 million, but it remained at $530 million even under the less stringent definition.

As might be expected, the institutional error-rate picture changed when missing documents were not considered an error. The error rate shrank from 33.5 percent of cases to 17.2 percent, and underawards exceeded overawards in numbers and dollars.

The less stringent definition also affected student error, reducing the proportion of cases in error from 39.4 to 27.3 percent. The dollar amounts changed very little. As we noted above, students considered ineligible under the stringent definition of error (counting missing documents as an error) did not have their application error counted; relaxing the document requirements permitted counting these new cases when they contained student error, which may account for the small decrease in the payment consequences of student error.

We concluded from this analysis that even when a far less stringent definition of "accurate Pell award" is used, error rates and their dollar consequences remain substantial. Additionally, underawards resulting from institutional error become an even more noticeable type of award error, affecting 10 percent of the student recipients.

PROBLEMS WITH THE DEPARTMENT'S ERROR DATA AS GUIDES TO IMPROVEMENT

We evaluated the Department's research and asked two independent statistical consultants to review the most recent report on 1982-83 errors. We found no reason to question the basic national data and aggregate analyses reported in the Department's most recent study of error, but our evaluation did reveal at least five limitations that affect the usefulness of the data and analyses for some kinds of detailed descriptions of the error problem and, especially, for designing corrective actions.

First, problems with the 1982-83 study's effective sample size mean that the Department does not have reliable estimates of error rates at different types of institutions. The Department used a method called "cluster sampling" to choose the institutions from which to draw the 4,000 Pell grants for study. For technical reasons, a sample chosen this way can result in a small effective sample. A small effective sample may mean that there are very few examples of some kinds of students, institutions, or errors, and the chances of being inaccurate in generalizing from small numbers are much greater than when generalizations can be based on observations from the entire set of collected data. Some kinds of corrective action cannot be confidently targeted

without reliable estimates of error rates at different types of institutions. The Department's contractor performing the Pell grant error studies in 1980-81 and 1982-83 agreed with our observations of the limitations associated with estimates for subdomains but noted that the Department's budget for the research limited the precision that could be achieved. The contractor added that warnings about the limitations of the sampling method are included in a technical volume of its most recent report.

Second, the Department's data on Pell grant error came from occasional research studies, not from regular program monitoring operations. Since the Department has not done an error study each year, it has no record of trends in error rates for the complete history of the program. Studies of error must compete with other priorities in the Department for discretionary funds in any year, and variations in the funds that are made available may result in variations in study design, which affects the comparability of various periods of error data. As we noted above, the 1978-79 error data are not fully comparable with the data in the most recent studies because of differences in methodology. Inconsistent data limit both the design of corrective action and the evaluation of its effectiveness.

Third, the studies did not examine special populations in the program. For example, there are no data for schools in the alternate disbursement system on error rates in institutional certification of eligibility or cost of attendance. Application errors by recipients at this group of schools were included in the 1982-83 estimates of student error, because estimates of application error were not as expensive to obtain as estimates of institutional error, according to officials of the Department's research contractor. In 1982-83, Pell grants totaling $29.6 million were calculated and disbursed directly by the Department to more than 32,000 students at these schools. Another example is the lack of information on error rates for the special-condition application. This is the Department's alternative application for students whose family situation has changed for the worse since the previous year. More than 204,000 applicants filed the special-condition application in 1982-83, and more than 116,000 students received grants that were based on data provided on this form.

Fourth, the Department's research does not directly examine why applicants or institutions made the kinds of errors they did. This is a difficult task, in light of the diverse kinds of error. The Department's studies emphasize identifying discrepancies and calculating their payment consequences rather than describing the behavior of applicants and institutions that caused the discrepancies. For example, the studies include no data on the extent of deliberate inaccuracy, or fraud. Yet only by being able to distinguish between fraud and the consequence of confusing application instructions, for example, can the Department consider how to create the conditions that allow

accuracy and determine the chances for improvement with various corrective actions.[4]

Finally, the Department does not plan its studies to include a deliberate examination of the effects on error of promising institutional practices, such as locally developed quality control plans that might be considered for adoption throughout the program. The Department could better plan institutional corrective action by knowing more about what is already working.

In short, while the Department's two recent studies provide important evidence of national error rates, they have shortcomings. Some of these could be offset in part by routine monitoring of the program's operation. But even the usefulness of these special research studies for developing ways of correcting error could be expanded greatly by using other designs and asking other questions. The questions would center on the reasons for error and the ways of creating the conditions for accuracy by both applicants and institutions.

SUMMARY

The Department's studies, while limited in some respects, do identify continuing problems with award accuracy despite changes in validation methods. The error is sizable and persists. The Department has focused on reducing student error even though institutional error makes up almost half of the $649 million of award error.[5] Student error, which results chiefly in overawards, was present in 39 percent of awards in 1982-83 and 38 percent in 1980-81.

Of the two items selected for validation in 1982-83, the net error decreased for one, adjusted gross income. The other, federal income taxes paid, was a relatively small source of error both before and after the increase in validation activity. Error continues in the adjusted gross income item. Other application items not included in the Department's validation requirements show sizable error rates. Of these, three of the four application items with the largest error are forecast items, which may be inherently prone to error and not highly amenable to correction. Institutional error was reduced somewhat in 1982-83 by streamlining forms, but the reduction may not be associated with actual cost saving.

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[4]The Department has looked for correlations between error rates and some institutional characteristics other than type, and it has investigated the characteristics of students associated with specific errors. These searches have been inconclusive.

[5]The $649 million is absolute error, or the combination of overawards and underawards.

Throughout our analyses, we found that the Department's research, while providing evidence of national error rates, has many shortcomings for guiding improvements. The research does not focus on the reasons for error and the possible changes that could be made to increase the accuracy of both students and institutions.

CHAPTER 4

UNDERLYING PROBLEMS IN THE DEPARTMENT HINDER RESPONSE TO PELL GRANT ERRORS

We examined three basic aspects of the Department's response to Pell grant error: the goals set for correcting error, the strategies selected for achieving the goals, and management arrangements for supporting the strategies. The congressional request for this study asked about the goals, decision process, evaluation methods, and other details of current validation, which focuses on some student application errors. However, since the Department's data show continuing problems of inaccuracy in application items not validated, as well as institutional inaccuracies in processing Pell awards, we examined the Department's general approach to error beyond the specifics of validation in 1982-83. We found problems in goals, strategies, and management. A problem common to the three is lack of information. These problems help explain why error persists, despite the validation effort.

THE DEPARTMENT LACKS EXPLICIT GOALS AND TARGETS FOR CORRECTING PELL GRANT ERRORS

In addition to examining the goal of the Department's policy on validating applications, we looked for other goals for reducing error in the program, because the research has found several kinds of error from a wide range of causes that are potentially responsive to diverse corrective actions. For example, student application errors and institutional errors can both result in underawards and overawards, two different types of error that may have different remedies. Within the two overall categories of student error and institutional error, numerous specific errors in individual application items or stages of institutional procedure can be chosen for attention. Each may have more than one cause, and the causes could be addressed in different ways. Thus, in choosing corrective actions, the Department faces many choices; goals are one way of aiding choices, along with data from past operations and any research or experiments bearing on the choices being considered.

Once general goals have been set, targets must be chosen. For example, a target within the general goal of reducing all types of error might be to reduce the proportion of grants with overawards and underawards of $100 or more from the current 40 percent to 25 percent. An even more specific target might be to reduce the error rate in the institutions' determining whether recipients are enrolled full-time or part-time from 22 percent to 15 percent. The targets could be for the short term, such as for a single year, or the long term, such as for a 5-year program.

We found that the Department has taken many actions connected in some way to the problem of Pell grant error. A partial list includes publishing regulations requiring on-campus validation, publishing a validation handbook to guide schools in doing the required work, changing from time to time the methods of selecting students for validation and the numbers to be selected, seeking additional funds from the Congress for expanding verification, contracting for studies of Pell error, training institutional staff in following departmental rules and managing financial aid, and reviewing compliance with the program's rules at some schools each year. We found that these have not been guided by formal statements of goals, purpose, or philosophy and that no specific targets have been set. Department officials could not provide us any written statement of goals for validation or for other initiatives for increasing the accuracy of Pell grants.

Therefore, we examined the general aims being pursued with corrective action. The major corrective action is validating student applications, which has the implicit goals of identifying inaccuracies by means of the campus-based verification of several data items and deterring further inaccuracies by means of giving publicity to verification.[1] The emphasis appears to be primarily on items on student applications that result in overawards. Thus, in considering a range of possible corrective actions, the Department has not emphasized activity directed toward correcting underawards and institutional error.

In our discussions with Department and OMB officials and with the contractors' staff who process applications and do research and analysis for the Department, we heard repeatedly the opinion that the action that has been taken could have benefited from more comprehensive discussion and clarification of goals, purposes, and targets, in light of disagreements within the Department and in the higher-education community. Officials told us that deciding on an action was often difficult and delayed because of basic unresolved differences over the accuracy of the error data, their meaning and implications, and the importance of increasing accuracy relative to other objectives of the Pell program. We heard about different objectives from

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[1]The Department has tried the strategy of having the application processing contractor check for missing and discrepant data when applications first arrive. Under specific conditions, the Department returns an application and asks the student to examine particular discrepancies and correct them if necessary. Several items on the application such as data on Social Security benefits are also checked by computer-matching with government records. Both activities probably deter or correct some application errors. Because they have been used for many years and seem not to be under revision, we did not examine them with the same detail as we did validation.

some officials, but most spoke only generally about the purpose of the Department's actions concerning Pell grant error. One official downplayed the results that might be obtained from correction on the grounds that the real objective is deterrence, or improving the accuracy of all applicants by increasing general awareness of the chances that their data will be verified. However, while we heard about efforts to detect and correct errors through validation, we did not hear about significant plans or activities for deterring Pell grant error.

Although the Department has no formal targets, we found that it does estimate the potential reduction in net error from choosing the numbers of applications and application items to be validated. However, the data that are used to make this estimate are weak, and in 1982-83 they were misinterpreted (see appendix IV). Thus, besides lacking explicit goals for its efforts, the Department does not have reliable forecasts of the likely effects of a given year's validation plan.

The Department addresses institutional error through program reviews and training, although it has taken no specific action comparable in scale to expanding student validation. Officials in the Department's units responsible for reviews and training did not describe specific goals for improved institutional accuracy and, at the time of our review, had not been significantly involved in examining the results of the research on error in order to set goals for improvement.

PROBLEMS OF STRATEGY INCLUDE MAJOR INFORMATION GAPS HAMPERING PLANNING

We defined strategy as the plans made and activities performed to achieve goals. In addition to examining the Department's strategies for reducing Pell grant error, we reviewed how it uses data to evaluate and adjust its plans and activities.

Strategy on application errors

The Department's strategy for reaching its major implicit goal is to reduce student application error by validation, which represents detection and correction after the fact. The Department has varied both the number of applicants it requires to be validated and the number of application items it requires institutions to check for error. Although Department officials have discussed the benefit to be gained from a strategy of preventing erroneous data from entering the Pell grant application system, in practice they have done little toward it. This is indicated, for example, by the absence of an aggressive prevention of inaccuracy by improving the application form, such as by reducing or simplifying the data elements required on the form or by otherwise modifying the form and its instructions. We found only one limited test of an alternative form and modest use of expert consultants in forms design. Law and policy have set some restraints on change in the design of the form, but the

Department has rejected the consideration of some possible improvements, partly in order to avoid the disruption of established data-processing routines.[2]

Strategy on institutional errors

The Department does not have a strategy for correcting institutional error other than regular program review and training activities, and these activities have no formal goals or targets. We discussed with the officials in charge of program review and training whether their activities have reflected plans for reducing the institutional errors found in the Pell error research. Officials in both areas could tell us little about the ways in which their work is directly linked to the problems that are shown in the Department's data.

The Department's formal review of institutional compliance with the requirements of all federal student-aid programs is administered by the program review branch of its division of certification and program review. Performed in visits to individual schools, these reviews can be a strategy both for decreasing errors at a specific school and for developing further data on problems and their correction by analyzing the results of the aggregate reviews. We have commented before on the general limitations of the Department's program reviews for insuring that schools comply with program rules.[3] Only between 48 and 57 staff members have been available in recent years to do the reviews, and, therefore, the number of schools that can be reviewed and the depth of each review are limited. The Department has reviewed 500 to 700 annually in recent years. Since 5,000 to 7,000 schools participated in all the Department's financial aid programs in these years, about 10 percent have been reviewed each year. But not all reviews were on compliance: some were reviews of schools that had sought approval to offer federal aid for the first time, and others were reviews of schools that had closed their doors.

The typical visit is for 3 to 4 days by one person. According to a Department official, about 15 to 20 student-aid files are sampled for each program year being reviewed. The

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[2]After we collected our data, the Department asked its forms-design consultants for a more comprehensive review of the federal student-aid application form. In an interim report to the Department on February 11, 1985, the consultants noted that only minor changes have been made in recent years, even though the form is complex and crowded, and suggested significant alternatives, including some consistent with our analysis in appendix VI.

[3]Many Proprietary Schools Do Not Comply with Department of Education's Pell Grant Program Requirements, GAO/HRD-84-17 (Washington, D.C.: August 20, 1984), pp. 31-33.

review covers compliance with all program rules for financial aid, not just Pell grants, so that limited attention can be given to any of the particular types of institutional error found in the Pell error research. Time limits also seem to preclude a search in any depth for the causes of observed problems for the purpose of recommending corrective action.

The program review official told us that there has been no written guidance on how to do a program review since 1978. Therefore, we could not determine whether the three Pell error studies have been reflected in directions to the reviewers for increasing their examination of institutional error. This official did not recall that any other, less formal guidance for program reviews had changed in response to the research findings.

Department officials familiar with the scope and methods of the review process said they believe the Department already has difficulty determining compliance with one complex self-monitoring requirement that schools track the academic progress of aid recipients. If the Department required institutions to implement quality control plans in response to Pell error, as has been proposed in circular letters to schools, it seems from what we learned from Department officials that present resources for program review would not allow for the effective review of the implementation or the results of such plans beyond the most basic questions on compliance.

Department officials told us that there is no prescribed sampling procedure, such as random sampling; each reviewer decides how to select files for review. From a small number of files not selected at random, there can be no statistical basis for an accurate projection of error rates. The reviewers make quantitative projections of the incidence of problems and their dollar value from the records they examine. (Total institutional liability for errors in all the student-aid programs in fiscal year 1983, for example, was assessed at $6 million.) But in recognition of the data limitations, the Department usually offers a school the option of detailed study of larger samples of records, if the findings seem to be significant.

Within the limitations imposed by the number of schools, the depth of review, and the accuracy of estimates, the Department's program review strategy is further limited in its ability to follow up its requirement that schools take corrective action. We presented our findings about this limitation in the report we referred to above. The schools are generally not revisited by Department reviewers to see whether planned corrective actions have been taken, and the Department's reliance on independent biennial audits may not be a good monitoring tool because of their apparent weaknesses in coverage and in reporting compliance with program requirements.

Finally, the Department seems not to use its program reviews as a general source of information for evaluating and

understanding institutional behavior. A Department official told us that it has, for example, collected no summary information from review findings on either errors in performing validations or difficulties with institutional compliance. Program review activity seems not to have been integrated into an overall strategy: staff in the program review unit told us they had not seen the Pell grant error research, had not served in working groups developing new validation policy, and had not been involved in developing draft regulations that included the possibility of substantial new quality control responsibilities for institutions and that should be reviewed.

Besides reviews of compliance, the Department's strategy for reducing institutional error includes training and support. Officials at our case study schools told us that these could be useful, since Pell was the most difficult program to administer of all the programs in their offices. We found that the Department offers two kinds of help to institutions: voluntary workshop training on all aspects of financial aid administration and the $5 administrative allowance for each recipient. Institutional accuracy could be improved with the availability of information on promising practices, but we found no specific materials for improving the accuracy of Pell awards. A new handbook on quality control has been written by a Department contractor, but it has not been adopted as Department policy and had not been distributed when we were doing our review.[4]

We discussed training in financial aid administration with an official in the Department's training branch, and we reviewed course outlines. Much training time is spent keeping school officials informed of program regulations and procedures. Many topics are covered in the training in relatively short periods, so that it seems unlikely that Pell grant error and quality control issues could be discussed to any significant extent. Department officials told us that, except for a general intention to reflect consistent exceptions or problems found in program reviews, there is no substantial link between the training activity and analyses of data on institutional problems that have been found in program reviews and the research.

That is, the training curriculum has not based very much change on problems located in the field, nor has the Department encouraged specific institutions to take training when problems have been discovered. The Department does not use information on who attends the training to see if all types of schools are represented or to do other analyses. Several years of training evaluation data have been collected, but the data have not been

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[4]Department training officials told us in March 1985 that quality-control training workshops that were to use the new handbook had been canceled for the year because of a lack of funds. A new plan was developed to use the handbook at a few schools in a test of institutional quality control in 1985-86.

analyzed. Thus, training has not been part of a deliberate strategy for correcting or preventing institutional causes of inaccurate Pell awards.

Problems with data for adjusting strategy

We found many weaknesses in the information that is available to the Department's officials for understanding the effects of its strategies and designing improvements. In general, feedback on the performance of the Pell grant system is voluminous, delayed, and ambiguous, and knowledge of the underlying behavior of applicants, recipients, and institutions is very limited.

To understand regular program operations, the Department examines reports received throughout the year from the application processor as applications are received and processed and from schools as payments are made to students. In addition, applicant and recipient files are merged after the end of a program year to allow analyses of the whole year. The production data are voluminous, and the staff responsible for producing the reports required of the previous processor expressed doubt that the results can be readily interpreted. For example, data that the processor provides on applicants at any particular point in the year are especially ambiguous because the applicant "pool" is different at different times of the year. School payment reports provide nothing more than accounting data, so little can be learned about the quality of operations at the schools.

End-of-year reports are generally not available until long after a year has ended, and interpreting the data to evaluate specific strategies that might have been used during the year is difficult because of the mingled effects of changes in the program and changes in environmental and institutional conditions. Data from the special error research studies have the shortcomings described in chapter 3.

Department officials and contract research staff told us of numerous gaps in basic knowledge about applicants and institutions that make design and adjustment of strategy harder. For example, the Department knows little about how students and their families actually fill out the application (when, where, with what available records and help, and with what use of the instructions) or about why they misreport data. Department officials have general knowledge about the basic institutional processes of administering federal aid, but they lack hard evidence from systematic research or monitoring to show which staff and other resources are available, the functions and priorities of financial aid offices that could be affected by federal policies, and the costs of the activities of these offices.

The Department does use past data to simulate the budget effect of changes in the Pell formula or other policy assumptions. However, because of the limited knowledge of why people in the student-aid system act as they do, its simulations cannot

reflect the possibility that people will respond differently to changes in requirements or procedures. During our review, Department officials did not identify for us any systematic program of experiments with policy variations or pilot tests of possible changes in aspects of procedure such as the application form. With such a program, the Department could try out promising variations in real settings and add behavioral data to the simulations that would improve forecasts. For 1985-86, the Department plans two experiments, one with electronic data submitted from schools and the other with institutional quality control.

The Department has used the strategy of student validation for several years (the numbers validated in 1980-81 through 1983-84 and estimated for 1984-85 are shown in table 23), yet we found many gaps in data for making decisions about it. We developed a list of decisions the Department must make regularly

Table 23

Selection Methods for Pell Application Validations in Program Years 1980-85

Method	Number of applications selected[a]				
	1980-81	1981-82	1982-83	1983-84	1984-85
Random choice[b]	51	73	1,395	86	152
Preestablished criteria[c]	274	246	265	287	317
Error-prone model[d]	e	e	e	221	191
Cross-year comparison[f]	e	e	e	454	146
Questionable applicant status[g]	e	e	e	e	206
Total	325	319	1,660	1,048	1,012

[a]Numbers are thousands. Figures for 1984-85 are targets estimated by the Department; figures for the other years are actual numbers selected.
[b]As defined by the Department.
[c]A set of selection rules that change from year to year and are based on how applicants correct originally reported data.
[d]A set of criteria that are drawn from statistical analyses of applications containing error and that change from year to year.
[e]Criterion not used.
[f]Used to select applications from students who also applied in a previous year; comparing prior and new applications leads to the selection of applications indicating suspicious data patterns.
[g]Several different kinds of criteria, including discrepancies in tax-filing details and applications indicating that the applicants are not U.S. citizens.

about validation, and we identified examples of related data and analyses that could form the basis for these decisions (see appendix IV). We found that the Department's data are inadequate to support decisions on a number of dimensions, including selecting students for validation, forecasting the dollar costs or savings of validation, and evaluating its effects. For example, estimating the costs of administrative processes is often difficult, but the Department had little or no information, when it decided to expand validation for 1982-83, either on the cost and effort that institutions have spent in administering the Pell program or on how these might be affected by adding to the volume of validation. Without this type of information, the Department could not assess the reasonableness of the administrative allowance of $2 per recipient that was proposed to the Congress when the expanded validation requirement was proposed, nor did the Department have data for estimating validation's burdens and other effects on students.

Table 24

Opinions of School Officials on Proposals for Changing Pell Validation

Proposal	Strongly support or support	Neither support nor oppose	Oppose or strongly oppose
Eliminate use of estimated data on the application	58	19	24
Shorten application to 5 or 6 data items	45	29	26
Have processor conduct validation by computer-matching application data with 2-year-old IRS data	42	25	33
Have applicants send documents to processor for analysis rather than institutions	39	15	46
Change student-aid report tolerances	39	49	12
Provide incentive for on-campus validation by allowing schools to keep and re-award a percentage of Pell funds saved through validation	35	34	32
Validate 100 percent of Pell applicants on campus	33	10	56
Base number to be validated at each school on school's error rate	23	37	40
Validate a few items for everyone, with intensive review of a smaller group	22	24	54

On a final point, we note that clear and strong direction for adjusting strategy is not likely to come from postsecondary financial aid officials. In our national survey of institutions, we asked them to respond to various options for changing validation. The options came from Department proposals and knowledgeable people whom we interviewed. The majority of the officials supported only the option of eliminating the use of estimated data on the application (see table 24).

MANAGEMENT PROBLEMS HINDER ACTION ON PELL GRANT ACCURACY

We found that management problems also hinder the Department's improvement of Pell grant accuracy. Specifically, we found that the responsibilities for identifying inaccuracy, developing strategies to correct it, and implementing the strategies are fragmented. We found also that the Department does not plan or budget resources specifically for corrective action and that hasty decisionmaking about program administration is common.

For example, table 25 shows divisions of the Department's office of student financial assistance and selected responsibilities related to Pell award accuracy at the time of our review. The diverse sources of Pell award error, the need for accurate and comprehensive data on error and the effect of corrective

Table 25

Selected Responsibilities for Pell Accuracy in Divisions of the Department of Education Office of Student Financial Assistance[a]

Division	Responsibility
Policy and Program Development	Analyze policy; develop cost and budget figures; write regulations; develop application forms and instructions
Systems Design and Development	Develop and oversee short- and long-term plans for all automated systems
Training and Dissemination	Administer training for financial-aid officials
Program Operations	Administer application processing contract; oversee school disbursements
Certification and Program Review	Administer audits, school certification, program reviews, and student validation
Quality Assurance	Gather information on Pell grant error; develop correction plans and related materials

[a]The table shows divisions of OSFA during the period of our review. In September 1984, the divisions of systems design and development, and quality assurance, were moved from OSFA to a new unit, the Debt Collection and Management Assistance Service, which is part of the immediate office of the Assistant Secretary for Postsecondary Education. (See appendix VII.)

actions, and the range of potential preventions and remedies that could be needed suggest that all these divisions should be involved in coordinated work to analyze data, develop plans, and implement them.

However, since the Department has no explicit goals and targets for reducing error in the program, it is difficult for the staff who are responsible for regularly maintaining the Pell

system under demanding conditions to decide how much attention to divert to the problem of error. Department staff told us that its divisions have different perceptions of the definition and importance of error.[5] Contractors who have worked with Department staff on Pell grant administration told us that a lack of coordination between divisions with fragmented responsibilities allows disagreement to persist unresolved for long periods. For example, we learned that several versions of an advanced statistical method called an "error-prone model" were developed to select applicants for validation, yet none was implemented until 1983-84. Several observers attributed this, at least in part, to unresolved internal disagreement between supporters and detractors of error-prone modeling within the various divisions of the Department's office of student financial assistance.

The most serious example of apparent confusion over responsibilities was given to us by a Department official, who told us that the lack of coordination between the divisions responsible for generating and using data on error contributed to inaccurate or partial understanding of key research data, which in turn caused a major overestimate of the likely savings from targeting validation on adjusted gross income in 1982-83. A report on the Department's research data on application errors in 1980-81 awards showed a figure called "adjusted gross income error" that was estimated at a net total of $101 million. However, this figure combined two types of error in two different parts of the application: (1) using an incorrect adjusted gross income figure and (2) incorrectly claiming status as independent rather than dependent and, therefore, using an incorrect income figure.

The report stated in a footnote to a table that the figure was a combination, allowing the implication that validating adjusted gross income alone would not remove all the error included in the total figure reported. In discussing validation, however, Department officials routinely suggested that validating adjusted gross income for all students would yield about $100 million in savings.[6] According to a Department

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[5]We noted that institution and association officials knowleageable about student aid beyond the Department also have different perceptions about how extensive the problem of error is in the Pell grant program. The Department's research data on 1980-81 awards were controversial. The 1982-83 study had not been widely circulated at the time of our review, so we could not tell if it has generated similar controversy.

[6]In 1980-81, the $101 million in "adjusted gross income error" included $38 million of error made by those who correctly identified their dependency status. The remaining $63 million came from those making an error in claiming dependency status (and thus using the wrong adjusted gross income figure). As table 20 in chapter 3 shows, adjusted gross income error

official familiar with the decisionmaking that led to expanding validation in 1982-83, this misunderstanding about the multiple sources of error in the $101 million figure and limiting its correction to only one type of error resulted in part from the fragmentation of responsibility for gathering error data, interpreting them, and developing policy responses to the findings.

We found that the Department also does not plan or budget resources specifically for correcting Pell errors. Further, the Department does not analyze what is spent on validation. Thus, the Department cannot judge the cost-effectiveness of validation as one corrective action among many possibilities.

When we examined the costs of validation--including the cost of the validations done by Department headquarters staff, the costs (included in the Department's overall contract with the processor) for handling the increase in corrections resulting from validation, and other costs of administering the national validation effort (including the error research)--we found that the Department's total validation cost was approximately $5.5 million for fiscal years 1982 and 1983. Two comparisons suggest that the scale of this expense is modest. First, although we did not gather data on all administrative costs in the Pell program, we found when we considered application-related costs such as the full cost of the processing contract, payments for the services of the multiple data entry processors, payments to institutions for administrative allowances, and the Department's costs for performing and overseeing validations that the latter made up about 8.3 percent of the 1981-83 total. If we were to use a more comprehensive list of Pell administrative costs incurred by the Department at headquarters and under contract (such as printing and distributing applications, operating public information services, preparing and mailing checks for students attending schools in the alternate disbursement system, and operating the data-processing system that tracks advances of funds to institutions and payments to recipients), the Department's outlays for validation would be an even smaller fraction of the total administrative cost. Second, compared to the total funds awarded in student Pell grants in 1981-82 and 1982-83, the Department's outlays for validation are much less than 1 percent. (Further details are included in appendix V.)

Plans and decisions concerning the details of Pell program administration are commonly made under very tight time constraints, according to staff of the Department and the contrac-

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(narrowly defined) had decreased by 1982-83 from $38 million to an estimated $16 million, probably as a combined direct and indirect result of the expanded validation of that item. However, error in claiming status as dependent or independent remained almost the same, since validation procedures for independent students did not include a method of checking the accuracy of the claim of independence.

tors who are responsible for carrying out decisions. For example, only a few weeks elapsed between the fall 1981 receipt of the research data on errors in 1980-81 awards and a decision on how to respond to the complex evidence of various kinds of inaccuracy. The initial plan had been for the validation by the central application processor of a few data items for all applicants. The Department asked the Congress for authority to pay for this validation with more than $13 million from funds allocated to student awards. Officials of the 1981 contractor were given little time to consider the new idea. Many details of the Department's requirement were vague, yet cost estimates were requested quickly. The resulting estimates were very rough. Department officials told us that the time pressures in this period also contributed to the misinterpretation of error data and the inaccurate estimates of the likely effect of targeting only on adjusted gross income as discussed above. Staff in the Department and at the contractor told us that they recall numerous changes and considerable confusion when the Department discussed its plans for expanded validation with the Congress in early 1982. (Table 26 summarizes the events from the Department's first request to final congressional action.)

The results of this type of decision process included change in the directions given to the processing contractor (and the related costs of changing computer routines) and uncertainty for students and institutions. The Department did not notify the institutions of a settled validation policy for the 1982-83 program year until June 1982, several months after eligible students began receiving notices from the processor to proceed with validation. Further, because final action came so late, the Department was not able to completely carry out the direction, ultimately set by the Congress in approving the supplemental appropriation of $1 million for partial validation in 1982-83, that the applications most prone to error be targeted for validation.[7]

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[7]Very early in 1982, the Department told the processor to put aside a targeting model, based on statistical analyses of error, that had been planned for use in 1982-83 and instead to select 100 percent of the eligible applicants as called for in the initial Department proposal to the Congress. Selecting all applicants continued from March through mid-June 1982, when the Department told the processor to return to targeting because the Congress had not approved 100-percent validation for 1982-83. A congressional conference report directed the Department to target validation to applicants "statistically most likely to be in error," but instead it targeted students more likely to be in error than randomly selected students, not necessarily the most likely. This method, "preestablished criteria" in table 23, was based on judgmental analyses by Department staff, not statistical analyses of error-prone applications (see appendix VI). The same report directed that all applicants be validated in later years, which the Department has not done.

Table 26

Chronology of 1981-82 Interaction Between the Department of Education and the Congress on Proposals to Expand Validation

Date	Event
1981	
Dec. 8	Secretary requests amendment to continuing resolution permitting $13.1 million of Pell program funds to be spent on administrative costs of central validation by processor
Dec. 11	Senate staff tell secretary that it is too late to amend continuing resolution
Dec. 15	Secretary requests authority to reprogram funds for central validation
Dec. 17-18	House and Senate committees reject immediate reprogramming; House schedules hearing
1982	
Jan. 22	Secretary modifies request, asking for $10.2 million for 100-percent on-campus validation, since time does not permit adding validation to processor work load
Jan. 27	House holds hearing; Department revises its cost estimate for the published record
Mar. 23	House Committee on Appropriations reports urgent supplemental appropriations bill, disapproving revised request for $1.9 million and 100-percent on-campus validation
May 18	Senate Committee on Appropriations reports urgent supplemental appropriations bill, approving $1.9 million and 100-percent validation
June 10	Conference approves $1.0 million and validation only of the most error-prone for 1982-83 and directs 100-percent validation for 1983-84 and beyond
June 24	President vetoes bill; the Congress passes revised bill, Department validation funds unchanged
June 28	President vetoes revised bill
July 14-15	Conference issues report on further revised bill maintaining earlier report language on validation; the Congress passes bill, Department validation funds unchanged
July 18	President signs Urgent Supplemental Appropriations Act of 1982 (Public Law 97-216) including $1.0 million for Pell validation

The decisions on validation after 1982 have typically been made within a short period each year, making it harder to improve technical approaches within current policy or to consider major alternatives to validation. Decisions (such as numbers to be selected, criteria for selection, and items to validate) that occur in late fall are driven by the annual need to set the parameters for the work of the application processing contractor, which must be prepared to handle some five million applications when they start arriving in February of the next year. The Department develops an overall system design, specifying all the processing steps, including the initial application checks, the rules for suspending applications when data are discrepant, and the calculation of eligibility with the latest formula. The design of validation for a coming year is a part of the overall design prepared in this short period, since the processor

must know the Department's criteria in order to select students for validation and print instructions on the student-aid report for the extent of the validation to be done in a year. The decisions about a coming year's validation are technically difficult, since they must be made when only partial data are available for evaluating the effects of validation approaches used in the year still in progress. Timely decisions are especially difficult in years in which the Department is negotiating with the Congress over the Pell grant formula.

It is an issue whether the effort required to direct the operation of the currently complex Pell grant system allows staff enough time to consider alternative designs and strategies that could prevent or correct award inaccuracy. The consequence of devoting most of the effort, except for a brief period in each year, to regular operations is modest progress toward resolving error problems (as shown by the data in chapter 3).

THE DEPARTMENT DOES NOT ACTIVELY SCAN OTHER AGENCIES' EXPERIENCE

We reviewed the role in the Department's decisionmaking of information on programs from other agencies that base award benefits on need. Other agencies that have a history of work on the accuracy of awards and the verification of applicants' data, and have tried specific approaches, might have had results the Department could learn from. We expected to find interagency discussion, in view of the current administration's initiatives to improve payment integrity across agencies.

Few officials we spoke with described the Department as having made an active, continuing search for relevant experience elsewhere. For example, computer-matching income data on Pell applications with tax forms had not been explored with the Internal Revenue Service because conversations held several years ago led the Department to believe it to be unworkable. Similarly, Department staff responsible for training financial aid officers did not know of training strategies used by other agencies to improve quality control in organizations administering federal programs. Experience with forms design developed in the public and private sectors had not been used very much in recent years in the Department. Nevertheless, the potential benefits of this approach were exemplified by the officials who were responsible for error research having commissioned a review of quality-control regulations in other agencies and having found apparently useful ideas. Moreover, we found, in discussions with Department staff, experienced observers of student-aid activities, and officials of other federal programs facing similar problems, many ideas that could be applied at different stages of the Pell grant process in an effort to improve its accuracy. (They are presented in appendix VI.)

None of these can be described as proven remedies, but they promise to be useful and deserve further study as part of a more

experimental approach that could help the Department. The ideas we found raise many complex technical questions that are hard to settle with existing data. Pilot tests with ideas for corrective action allow systematic assessment of the costs and effects of changes such as redesigning application forms and computer-matching Department and IRS data. Experiments may be especially important if ideas are drawn from other programs; they are a plentiful source of ideas, but their circumstances are so different that their approaches should be given further study, development, adaptation, and trial in the educational context.

Since Department officials noted that attention to the accuracy of Pell awards was spurred several years ago by pressure from OMB's budget review staff, we spoke with OMB officials to find out if their role had included sharing information from various agencies facing common problems. The officials we spoke with indicated that their role as part of the budget examination process had chiefly been to put pressure on the Department to take action on error--first to study it carefully and then to respond to the findings. It appears that OMB offered little substantive guidance about promising practices drawn from other agencies. After we finished our review, Department officials told us that OMB had provided the Department with structured guidance about the general elements of an acceptable approach, through a new management review process, but it is not clear whether the guidance was based on evidence of effective practices elsewhere or on general management principles.

MANY POSSIBLE RESPONSES TO APPLICATION ERROR HIGHLIGHT PROBLEMS IN TAKING CORRECTIVE ACTION

Table 27 is a list of alternative approaches the Department could take in response to application error, beyond modify-

Table 27

Alternative Approaches to Improve Pell Application Accuracy and Verifiability

Approach	Examples
Change individual data elements	Require names of household members and students in post-secondary schools
	Require specifics of other income on form
	Redefine to improve verifiability (e.g., dependency items)
	Eliminate some kinds of income to simplify form
Change method of gathering data from applicants	Use different forms for independent and dependent and for simple and complex situations
	Enter data more directly into automated system
Change need-analysis method	Use fewer data items to determine need
	Eliminate prospective data items, using only base year to determine need

ing validation. If validation were included, our list of actions would be longer, and a variety of questions would have to be answered (as suggested in our analysis in appendix IV). Table 27 shows three types of change to the application process that respond to problems that were found from the Department's error research. Each action in the table could help correct some errors noted in the Department's research. For example, redefining specific data elements could make it easier to fill out the form or to gather information that would be easier to verify. Several forms could be designed, each for the use of a specific group of applicants, tailoring the instructions and data elements more precisely to an applicant's situation. Students whose family finances are not particularly complex could be given a simplified application form. The form could be simplified to require less information from students if the overall formula for calculating their need were changed.

However, making an informed choice among the possible responses is a difficult task that includes analyzing error data, developing the details of specific corrective actions, projecting the costs and benefits of alternatives, and comparing them against the various objectives of the Pell grant program. The choice is hard enough to make if corrective actions are considered one at a time. If several actions are to be taken simultaneously, their interaction increases the complexity of the analysis and the uncertainty of the outcome.

We have observed that, during the period of our review, the Department had not planned corrective action far enough in advance of implementation deadlines to permit the study and deliberation that are required. An absence of goals and weak data complicate the effort, as does the lack of coordination among the Department's various offices responsible for the different aspects of the program. And even if all these matters were resolved, the focus would still be only on application error and would leave untouched the problems of helping institutions make their awards more accurate.

UNDERLYING PROBLEMS OF GOALS, STRATEGY, AND MANAGEMENT MUST BE ADDRESSED BEFORE SEARCHING FOR TECHNICAL SOLUTIONS TO ERROR

The choice of specific solutions to the problem of error can best be made, we believe, when there are explicit, clearly defined, and accepted goals. And, to the extent that overall accuracy is the objective, the goals must be comprehensive enough to include the correction of underawards and overawards. Because the many areas that require corrective action are complex, the overall goal may have to be broken down into intermediate targets extending over a number of years.

If specific goals have been established, various strategies for correcting error can be systematically considered. Strate-

gies can be considered that go beyond the remedial policy of validation and include an active search for ways to prevent inaccurate information from entering the system. Improved data would aid in both the design of strategies and the evaluation of their effects. A wide search for and deliberate study of the best practices and ideas from schools and other programs would be helpful. Experimentation with new ideas can offer useful pilot data before they are incorporated into the routine.

Given the thousands of higher-education institutions with which the Department works to carry out the Pell grant program, attention might be given to including postsecondary schools as it sets goals and develops strategies for accuracy. Their participation could be beneficial in providing the Department with additional data on institutional administration of federal student aid, helping it resolve differences of view on the extent and importance of Pell grant error, and building commitment to further corrective action, especially action that may be required of school officials.

Finally, the Department could review its fragmented responsibility for action on the accuracy of Pell awards and adopt an approach that would insure more timely and coordinated action to interpret data, develop a broad range of options, decide on the best ones, and implement and evaluate them. Department managers need to coordinate plans for corrective action that include explicit analyses of the costs of the effort and that encourage a comparison of the costs and results of diverse strategies.

We have identified some weaknesses in the evaluation of the grant program. The program would be better served by a monitoring and evaluation effort that begins with the goals of the program and proceeds to an examination of the implementation, costs, and effectiveness of the strategies for achieving the goals and that feeds information back for timely program improvement efforts.

SUMMARY

We found that the Department's approach to the problem of inaccurate Pell awards lacks well-thought-out goals and precise targets for guiding staff and institutions. The Department emphasizes only one of many possible strategies, lacks data for redesigning or improving validation, and is hampered by a management approach in which fragmentation and uncertainty persist in the offices with responsibility for the problem, as long as they are without a central policy direction. Decision-making under the continual stress of meeting annual deadlines for processing applications may make it hard for the Department to address the full range of error in Pell awards and to design comprehensive responses to it.

Although many specific ways of preventing and correcting inaccuracy in Pell grants can be suggested, we believe they will

have only a limited effect until the Department describes the nature and extent of the problem and follows this by setting explicit and comprehensive goals for correcting it. Both long-term and short-term, preventive and remedial, strategies could then be developed for reaching the goals. They will be implemented most effectively, however, by an office with well-defined and coordinated responsibilities for addressing Pell award error and for evaluating the results of adopting the strategies.

The discussion of deciding whether to continue the present approaches or to adopt alternative ones raises the question of their feasibility. Increasing the quantity and quality of the data on the problem, analyzing a greater number of options from a wider set of sources, and spending more time deliberating their effects all have costs. As we have discussed, the continuing pattern has been to make decisions under serious limitations of data and time. Significant action will be required for change.

CHAPTER 5

SUMMARY, CONCLUSIONS, MATTERS FOR CONSIDERATION, AND AGENCY COMMENTS AND OUR RESPONSE

SUMMARY

The Pell grant program receives more federal funds than any of the five other student financial aid programs funded under title IV of the Higher Education Act. In 1982-83, the program granted more than 2.5 million students awards totaling $2.4 billion. The administration of the program involves individual applicants and their families, a central applications processor, and institutions of postsecondary education. The discovery of substantial error in awards has led to increased controls in recent years, especially over student application data, culminating in a major expansion of documentary verification of the applications of about 66 percent of the recipients of Pell awards in 1982-83. In this report, requested by the Chairman of the Subcommittee on Postsecondary Education of the House Committee on Education and Labor, we have examined the effects of expanded validation on institutions and students, reviewed and evaluated the Department's data on the effects of validation on award error, and analyzed the goals, strategies, and management of the Department's efforts at corrective action.

Effects of expanded validation on institutions and students

We found that the Department's expanded validation requirements have had some costs for schools and some modest effects on students. Validations done by schools increased 57 percent in 1982-83, but some of the increase resulted from schools' voluntary activity.

Almost a third of the schools reported that their policy is to validate all Pell applicants. Of the institutions not validating all Pell applicants, 81 percent reported that they validated more students than the Department required. Whether required or voluntary, increased validation activity required extra work, which schools accommodated by increasing the time staff devoted to validation by a third and by making other adjustments such as allowing overtime. However, few schools had to make these special adjustments to a great or very great extent. Validation continues to rank low among all student financial-aid administrative tasks in effort required, at least according to data from our case study schools. The institutions did have some problems with validation, but they were generally satisfied or neutral about most aspects and willing to see some form of validation expanded to other federal student-aid programs.

The cost of staff and other resources schools used in doing a validation appears to have averaged about $14. Validation

cost the most for small schools that cannot attain efficiencies of scale and for schools with short programs and, therefore, the frequent admission of new students without experience with financial aid.

We gathered several different kinds of information to identify the effects of validation on students. We compared the problems reported by Pell grant recipients who were and who were not selected for validation, as well as making comparisons within a small group of Pell applicants who never became recipients. We found that selecting applications for validation increased the proportion of students who changed their Pell applications. We found also that the large majority of the students who were validated reported not having experienced adverse effects while some students did report problems. In addition, the institutions reported that about 5 percent of the validated applicants experienced problems that led them to defer enrollment, to change from full-time to part-time enrollment, and, in a very small percentage of instances, to leave postsecondary education.

About a third of the students selected for validation reported delays in receiving awards; in contrast, about a tenth of the nonvalidated students reported such delays. Among students reporting award delays, about a sixth reported changing their academic plans (for example, taking fewer courses) and about two thirds reported making financial adjustments (for example, borrowing money or cutting back on their budgets). These effects may seem relatively small in the context of the millions of students who were validated, although even a small percentage of more than a million can mean that several thousand individuals experienced problems. In 1982-83, for example, an estimated 69,000 changed their academic plans to some extent as a result of validation.

Effects of validation on Pell award error

Validation was expanded because of data showing error, and data on 1982-83 Pell grants show that despite increased validation, substantial error continued. Totaling $649 million, including overawards and underawards, it was caused by inaccuracies made by students and institutions, and it persisted even in student application items that the Department validated. In 1982-83, the Department estimated that 63 percent of the Pell grants were inaccurate by $2 or more. (Forty percent were inaccurate when a less stringent error tolerance of $100 was used and several documentation requirements were disregarded.)

The total of overawards and underawards resulting only from errors students made in their applications was estimated at $328 million in 1982-83. The Department found that student application error occurred in 39 percent of the awards; in 1980-81, it had been present in 38 percent of the awards. Most (83 percent) of the student error resulted in overawards; however, an estimated $55 million should have been awarded and was not. Vali-

dation reduced error in one of the two application items that were verified--adjusted gross income. However, the two items verified in 1982-83, as well as other nonvalidated items, continued to show discrepancies when "best values" were compared to the data provided by the applicants. Some of the discrepancies may result from items inherently prone to error, including items requiring forecasts.

Institutional errors, which seem to result in a considerable number of underawards, have been given little attention by the Department. Institutional errors decreased after 1980-81, when they were present in 42 percent of the awards, to about 34 percent in 1982-83, but they remained substantial at a total of $321 million in overawards and underawards. Of this total, $111 million, or 35 percent, were underawards; an estimated $210 million was overawarded. Institutional error continued to total nearly half (49 percent) of the total dollar error in the Pell grant program.

We found the Department's data on the incidence and dollar consequences of error useful at an aggregate national level. However, research limitations affect the usefulness of the data for some kinds of detailed descriptions of the error problem, especially for guiding corrective action. The research does not permit reliable estimates of error rates at different types of institutions, so that they cannot be targeted for either correction or study of exemplary practices; it does not examine special populations; and it does not provide fully comparable data for examining trends. The research also does not focus in any detail on the reasons for error and therefore is not as useful as it could be in suggesting changes that might increase the accuracy of both students and institutions.

Goals, strategy, and management of corrective action

We found that the Department has no formal, explicit, general goals or specific targets for corrective action. The need for goals stems from the many choices the Department faces in deciding how to respond to the many opportunities for increasing the accuracy of Pell awards. The Department's main corrective action, student validation, has aimed at reducing error in selected application items that lead to overawards. There is little emphasis on either student error that leads to underawards or institutional error.

The Department's strategy has been remedial, to detect and correct some student application errors. It has taken little preventive action. It has done less to develop strategies for dealing with institutional error. The Department does formally review institutional compliance with the requirements of all federal student-aid programs, and it does offer voluntary workshop training on all aspects of financial aid administration. This monitoring of compliance and training have r however,

been used as direct strategies for addressing institutional error in the Pell grant program.

Strategy formation and evaluation are additionally hampered by problematic data and the lack of data on current operations. There have been only a few pilot tests of alternative approaches, and there is no systematic program for identifying and experimenting with practices that seem promising. When the Department decided on expanded validation for 1982-83, it had little or no information on the costs and other burdens for institutions or students.

Management problems in the Department include the lack of coordination of diverse offices with responsibilities for award accuracy. Decisionmaking for corrective action in 1982 and later was rapid, spurred by deadlines for application processing at the start of the annual cycle. For example, Department staff and officials of its contractors recall considerable confusion in 1981 and early 1982, when responses were developed to the 1980-81 findings of error, in which there were uncertain interpretations of data, inaccurately high claims for the savings that could be achieved, changes in plans presented to the Congress, changes of direction for the processor, and uncertainty about validation policy for 1982-83 for the applicants and schools. We found that Department decisionmaking cannot be based on direct study of the costs and results of corrective actions, since the Department has not explicitly planned or tracked its use of resources.

We found that the Department has not commonly or systematically gathered the experiences of other agencies with similar problems. We determined that OMB, which might have helped inform the Department of other agencies' practices that promise to correct award error, had chiefly exerted pressure for action although it might have done more to share potentially useful examples with the Department.

CONCLUSIONS

In general, the Department has taken some useful steps toward Pell award accuracy; it has continued to study the extent of error, check applications through the application processor, and expand validation. But expanded validation has its costs, and error persists in the targeted items and items not targeted and in institutional processes not addressed. These observations suggest that further attention is needed if Pell award accuracy is to be improved.

Many technical approaches could be examined in a search for ways to correct the kinds of error identified in the research. (We suggest some in appendix VI; in appendix IV we discuss initiatives that could be taken for improving validation alone, such as strengthening and consolidating the methods for choosing applicants for validation.) However, our findings make clear

that choosing approaches effectively and implementing them in thousands of postsecondary institutions require setting goals and targets and searching for preventive strategies as well as remediation. These in turn require strengthened management in the Department, including the clarification of responsibilities.

MATTERS FOR CONSIDERATION BY THE CONGRESS

In view of the weaknesses we have reported, the Congress may want to consider the rates of Pell grant error to determine whether additional guidance to the Department would be helpful. An error-free environment is clearly not possible. However, an absolute error total of $649 million annually seems excessive.

The Department has funded some studies to measure error in Pell awards, but we found many gaps in the evaluative information. The Department could but has not, for example, evaluated the reasons for student and institutional errors, evaluated the types of institutions that have high error rates to determine the assistance or remedies they might be given, or evaluated the effect of voluntary training programs. The Congress may wish to consider whether the evaluative information that is now available is sufficient for achieving accountability and accuracy in the administration of the Pell grant program.

MATTERS FOR CONSIDERATION BY THE DEPARTMENT OF EDUCATION

Many initiatives could be taken to correct the various kinds of inaccuracy at several stages of the Pell award process. Some initiatives would require changes in the legislation, but the Department could present proposals for legislative change and accompany them with data showing their likely effects. For example, the Department has recently proposed simplified need analysis. Other action can be taken within existing law and regulation. However, we do not encourage the Department to adopt new measures until it has begun to address the underlying issues.

Before taking specific actions, the Department needs goals for accuracy, diverse strategies clearly linked to the goals, better data, and internal management structures that will apply leadership to corrective action.[1] Until these steps have been

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[1]After we gathered the data for this report, the Department developed a draft "Corrective Action Plan for Payment Error Reduction for Title IV Student Aid Programs" in October 1984, as directed by OMB. Several points raised in the plan are consistent with our analysis. It remains to be seen whether the Department's diagnosis of the problems will be expanded and internalized and whether remedial action will be vigorously and effectively pursued. The draft plan acknowledges the need for long-term and short-term actions. It acknowledges that the

taken, piecemeal approaches are likely to have problems of design, implementation, evaluation, and effectiveness. A comprehensive effort might include a more active search for relevant experience in other agencies and a greater use of pilot tests of promising practices without having to experiment on the regular system. In addition, a comprehensive effort to define goals and strategies might be made in cooperation with the postsecondary institutions that now carry the responsibility for day-to-day administration of the Pell grant program. This might be especially helpful if quality-control plans that would place even more responsibility at the institutional level are to be considered.

MATTERS FOR CONSIDERATION BY OMB

We noted in an earlier report on issues in eligibility verification in entitlement programs that OMB could help combat the general problem of isolation and duplication of corrective action agency by agency.[2] OMB could promote the sharing of promising internal practices in federal agencies, identify workable and effective approaches for institutions carrying out verification functions for federal programs, and encourage the use of joint or substitutable eligibility in order to reduce the work required for need analyses and eligibility reviews wherever possible.

We are encouraged by OMB's requiring the Department to develop a plan for error reduction in the Pell program. We urge OMB to maintain its oversight of the program, in future management reviews, to insure that OMB's concerns and the issues we have raised, including the need for improvements in Pell grant evaluation information, are considered and acted upon. We have noted how the absence of information has hampered the Department's decisionmaking regarding Pell grants.

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current process is "systemically error prone" and that efforts at improvement have been "mechanical changes." For future action, the plan states that "corrective actions that fail to address the systemic delivery issues hold little promise of achieving decisive reductions in the existing error rate." In February 1985, OMB directed the Department to implement most of the plan. In addition, in September 1984, the Department announced a reorganization that created a new debt-collection and management assistance service, reporting to the assistant secretary for postsecondary education, and that placed responsibility for quality control in federal student aid higher than before.

[2]Eligibility Verification and Privacy in Federal Benefit Programs: A Delicate Balance, GAO/HRD-85-22 (Washington, D.C.: March 1, 1985), pp. 47-48.

AGENCY COMMENTS AND OUR RESPONSE

The Department of Education and the Office of Management and Budget read a draft of this report. Their comments and our responses are given in appendix VII.

APPENDIX I

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COMMITTEE ON EDUCATION AND LABOR

U.S. HOUSE OF REPRESENTATIVES
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SUBCOMMITTEE ON POSTSECONDARY EDUCATION

September 7, 1983

Mr. Charles A. Bowsher
Comptroller General of the
United States
General Accounting Office
Room 7026 441 G Street, N.W.
Washington, D.C. 20548

Dear Mr. Bowsher:

The Subcommittee on Postsecondary Education is preparing for reauthorization of the Higher Education Act, including the Pell Grant program of student financial assistance.

This program has grown in the last decade, so that it now serves over two million students and distributes over two billion dollars each year. As a result of several Department of Education studies, concern has been increasing about errors in awarding funds in the Pell Grant program. In response to this concern, the Department developed a methodoligy known as "validation," which requires over one million of the applicants for Pell Grants to provide additional detailed documentary evidence to support their applications. We understand that the Department is collecting information on the effectiveness of this methodology as measured by the errors corrected this year through validation, and already intends to expand the procedure to other student aid programs as well.

However, testimony to my Subcommittee and to the National Commission on Student Financial Assistance, has raised questions about the validity of the Department's methodology, its costs, burdens, and other impacts and effects, though witnesses have lacked extensive data.

I am, therefore, requesting that the GAO conduct an exploratory study to see whether these concerns merit more detailed examination. The Subcommittee is interested in obtaining information on the questions presented in the attachment to this letter.

Discussions between the Subcommittee staff and the staff from your Institute for Program Evaluation have indicated that the Institute would be able to provide us with a briefing and preliminary informa-

tion from your exploratory study by early next year. A written report could follow as soon as possible after that if we later decide that is useful.

Thank you for your cooperation in responding to this request. If you have any questions please have a member of your staff contact Bud Blakey or Maryln McAdam of the Subcommittee on 225-8881.

Cordially,

Paul Simon
Chairman

PS/mmg

attachment

Questions for Analysis Based on Exploratory Study

Topic 1: Current policy

(1) What is the goal of the current Education Department (ED) policy on validation of Pell Grant applications?

(2) How did the Department decide on the current goals and methods, and with what consideration of burden?

(3) What does it cost ED to carry out its current policy and methods of validation?

Topic 2: Methodology

(4) Does ED have reliable data on award errors on which to base policy, and have those data been interpreted using appropriate methods?

(5) Are the methods for selecting students for validation statistically sound? Are they suited to the policy goals?

(6) Does the Department evaluate its methodology and use the findings in regular improvement of its approach?

Topic 3: Effects on institutions

(7) What costs are incurred by the diverse types of institutions of higher education in doing the validations?

(8) Are there other effects of the validation process on institutions? Are these more serious at particular kinds of institutions?

Topic 4: Effects on students

(9) What are the effects of the process on students selected for validation?

(10) Are there effects of the validation process that fall disproportionately upon particular groups of students?

Topic 5: Alternative approaches and methodologies

(11) What are various approaches to the problem of error in Pell Grant awards?

(12) Are there experiences of other Federal agencies, or of the private sector, that offer useful suggestions on this problem?

(13) Are there alternative methods for preventing or correcting award errors that could offer a better balance of positive and negative effects?

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SAMPLING AND METHODOLOGY

This appendix presents information about our samples of institutions and students and our survey and statistical methods.

THE SAMPLES

Our study involved the three separate samples of institutions and four separate samples of students outlined in table 28. Four of the seven samples were originally planned to allow generalization about particular populations or universes.[1]

Table 28

Overview of Study Samples[a]

Sample	Planned population	Planned sample size	Sample response Number	Sample response Percent	Number in respondent population
Primary institutions	5,009 central or independent institutions participating in the regular disbursement system	400	334	84	3,912
Supplemental institutions	773 branch campuses in the regular disbursement system	100[b]	49	49	[c]
Case studies of school financial-aid administrative costs	[c]	12[b]	[c]	[c]	[c]
1983-84 recipients at a community college	1,532 primarily minority, low-income, urban students	281	146	52	788
1983-84 recipients at a private, 4-year, traditionally black college	1,533 students	269	154	57	848
1983-84 recipients at a private university enrolling a national student population	469 students; the school validated all aid applicants and more application items than required	234	124	53	248
1982-83 applicants	434,714 applicants found eligible and highly in need but who never received an award	300[b]	42	14	[c]

[a]Findings can be generalized to the population of respondents, which excludes all schools or students who did not respond to our survey. When we excluded nonrespondents, we took into account their probability of being selected for our survey. Hence, the ratio between the number of schools or students in a respondent population and the planned population may not be exactly the same as the ratio between the planned sample and the sample responses. For instance, the respondent population for the primary institutional survey was 3,912, or 78 percent of the planned population, but the sample response rate was 84 percent.
[b]Not designed to permit generalization to any universe of institutions but intended to provide exploratory information on these populations.
[c]Not applicable.

[1]The 12 case studies of institutions were not designed to permit generalization to any universe of institutions. Rather, they were intended to provide detailed pictures of the administrative

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Hence, they were designed to take into account important characteristics of the populations they were drawn from. For example, we made sure that our sample for the primary survey of central and independent institutions included public, private, and proprietary schools with programs of all lengths and that our student survey samples included both validated and nonvalidated students wherever appropriate.

As is typical in survey research, the responses for the four samples fell short of 100 percent, but the structural plan for each sample was maintained. In other words, we were able to take into account the population characteristics we had planned for, in spite of having less-than-perfect response rates. Further, the response rates were adequate to permit generalization to most of the original population of interest. (We did not generalize to the nonrespondent portions of any population.) In addition, survey respondents appeared not to differ substantially from nonrespondents on important general characteristics.

Primary institutional survey: central and independent institutions

Our sample of institutions for the primary institutional survey was stratified on two dimensions: type, or length of program, and control. There were four types of schools: schools with both undergraduate and graduate programs and 4-year, 2- or 3-year, and less-than-2-year schools. There were three kinds of control: public, private, and proprietary.

The sample was also weighted by the number of recipients. The number of institutions we sampled to represent each group of institutions, defined by a particular combination of type and control, was determined by the proportion of the total population of Pell grant recipients accounted for by that group in 1981-82 (the most recent data available at the time of our survey). For instance, 32 percent of the Pell grant recipients in 1981-82 attended public institutions with graduate and undergraduate programs. Therefore, 32 percent of our planned sample of 400 institutions consisted of public institutions with both graduate and undergraduate programs. Although the sample size for each category of type and control was determined in this manner, the specific institutions sampled in each category were selected randomly.

Our sample was designed to be representative of schools that participated in the regular disbursement system for Pell

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costs of financial aid at diverse institutions. Similarly, the samples for the supplemental institutional survey of branch campuses and the applicant survey were not designed to be representative in the sense of providing estimates for these populations. Rather, they were intended to provide exploratory information.

Table 29

Primary Institutional Survey Sample: Responses by Category[a]

Type of institution	Type of control			
	Public	Private	Proprietary	Total
5-year-plus	112/128 = 88%	26/36 = 72%	1/1 = 100%	139/165 = 84%
4-year	21/24 = 88%	38/44 = 86%	1/1 = 100%	60/69 = 87%
2- or 3-year	95/108 = 88%	7/8 = 88%	12/16 = 75%	114/132 = 86%
Less-than-2-year	0/1 = 0%	1/1 = 100%	20/32 = 63%	21/34 = 62%
Total	228/261 = 87%	72/89 = 81%	34/50 = 68%	334/400 = 84%

[a]For each combination of type of school, type of control, and marginal total, the numerator is the actual number of survey responses, the denominator is the planned sample size, and the percentage of responses represents the resulting fraction. The 66 nonresponses include 56 institutions that never responded and 10 that refused to respond.

Table 30

Primary Institutional Survey Sample: Differences Between Respondents and Nonrespondents

Average	Respondents (n = 334)	Nonrespondents (n = 66)
Number of 1981-82 recipients	956	801
Number of applicants Department selected for validation	390	302
Student-aid index	360	288
Number of recipients with		
Greatest eligibility[a]	456	396
Least eligibility[b]	80	95
Cost of attendance	$3,444	$3,365
Pell award	$976	$1,010

[a]Student-aid index = 0.
[b]Student-aid index = 1,600.

grants. (Schools that participated in the alternate disbursement system were excluded because they did not perform validations.) From the 6,126 schools covered by agreements in the regular disbursement system in 1982-83, we omitted 806 branch campuses because of problems with the Department's classifications of these schools by type. Another 311 schools were dropped for various other reasons. Thus, our planned sample of 400 institutions was originally designed to be representative of the remaining 5,009 independent or central campus schools in the regular disbursement system that were authorized and eligible to receive Pell funds in 1982-83. The sample was designed to allow us to make estimates for this population 95 percent of the time within a range of error of plus or minus 5 percent.

The representativeness of the sample was affected by the rate of response to our survey. Table 29 shows that response rates were generally good for all combinations of type and control and for the total sample. However, response rates fell short of 100 percent, so that when statistical adjustments were made to eliminate nonrespondents (in accordance with their probability of being selected for our survey), our actual respondent population was 3,912 central and independent institutions in the regular disbursement system. Our survey revealed that the 3,912 institutions enrolled 1,921,359 Pell recipients in 1982-83, or 76 percent of the 2,522,746 reported by the Department.

Finally, as table 30 shows, the differences between respondents and nonrespondents were not great. For instance, the responding institutions tended on the average to have more Pell recipients than the nonresponding ones. This is not surprising, since the schools that tended to return surveys less frequently (proprietary schools with programs no longer than 2 years) also tended to be the smaller institutions.

Supplemental institutional survey: branch campuses

When we designed this review, we did not intend to distinguish between central and independent campuses and branch campuses. Our problems with the Department's classification of branches defeated this intention; nevertheless, we did not wish to omit branches entirely. Therefore, we drew a small supplemental sample of branches and sent them the institutional survey.

From the 806 branches, we dropped 33 for various reasons. Our sample of 100 branch campuses was thus designed to reflect the remaining 773 institutions in the regular disbursement system that received Pell funds from a central campus. The sample was stratified in terms of control and, like the primary institutional sample, weighted by the number of recipients. For instance, 66 percent of the Pell grant recipients were enrolled at public institutions. Therefore, 66 percent of our planned

sample of 100 branches were public institutions. The response rates were not as good as for the primary institutional sample, but they were adequate for analysis.

We analyzed the responses we received from the branch sample to see if they differed substantially from the responses we received from the central and independent institution sample,

Public	Private	Proprietary	Total
41/66 = 62%	4/21 = 19%	4/12 = 33%	49/100 = 49%

and we found that they did not.

Case studies of the administrative costs of financial aid

We made case studies of the administrative costs of financial aid at 12 institutions that were not representative of any population. Rather, they provided diverse examples of the resources required to administer financial aid. Because of the intensive research methods needed to review these resource requirements, we could not study a large and representative group of schools.

We did not select these schools at random. Nine had been selected for case studies of the administrative costs of financial aid in 1981-82 for the National Commission on Student Financial Assistance by Touche Ross. We contracted with Touche Ross to repeat the study of these 9 schools but for 1982-83 costs. Joining the new data with the earlier data provided a comparison of costs at 9 schools before and after the Department changed its validation requirements.

We included 3 additional schools in the study in order to increase the coverage of schools involved in the Pell program

Table 31

Characteristics of Case Study Schools

Type of school	Type of control			
	Public	Private	Proprietary	Total
5-year-plus	3	2	0	5
4-year	1[a]	1[a]	1	3
2-year or less	2	0	2[a]	4
Total	6	3	3	12

[a]One school was added to the original group of 9 in order to compose the final sample of 12.

and thereby provide more information on 1982-83 costs. For instance, the original 9 had included only 1 4-year institution, a proprietary business school. We added 2 more, a private, traditionally black institution and a 4-year public college. A second proprietary school with a program of less than 2 years was also added, since many such schools take part in the Pell program. As table 31 shows, the 12 schools reflected the diversity of our primary institutional sample.

Community college student survey

The community college among the 3 student survey schools was also among the 12 schools constituting the case studies of the administrative costs of financial aid.[2] The college serves an urban, low-income population made up mostly of minorities. We chose this school for our student survey primarily because of these characteristics.

The community college had 1,532 Pell grant recipients in 1983-84, and our planned sample was designed to be representative of this group. The sample size for the community college sample, and for the 2 other student survey schools, was determined primarily by trade-offs between our resource limitations and the response rates. On the one hand, our resource limitations allowed us to survey about 750 students in 3 schools. On the other hand, we were very concerned about response rates, which are typically no more than 30 to 40 percent for student samples. We did not want to sample fewer than about 230 students in any school. These concerns, and the particular structure of the community college sample (which was made possible by its exceptionally comprehensive, computerized student-record system), led us to draw a sample of 281 community college students.

The sample was stratified on two dimensions: financial need and validation status. There were two categories of financial need: very high (a student-aid index of 0 to 200) and other (a student-aid index above 200). There were five categories of validation status: not validated, validated and found correct, validated and found to have errors within tolerances, validated and found to have errors beyond tolerances but not great enough to warrant any change in award, and validated and found to have errors large enough to require changes in award. All recipients in the three last categories were included in our sample. A random sample of recipients was selected for the two other categories.

As with the primary institutional survey, the final representativeness of the community college student sample was

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[2]All 3 student survey schools participated in the case studies on cost, which provided comprehensive information about financial aid operations, including the validation procedures required of students.

Table 32

Community College Student Survey Sample:
Responses by Category[a]

Student-aid index	Not validated	Validated				Total
		No error	Error within tolerance	Error outside tolerance but no award change	Error leading to award change	
0-200	28/50 = 56%	18/50 = 36%	12/26 = 46%	10/21 = 48%	1/4 = 25%	69/151 = 46%
200+	28/50 = 56%	28/50 = 56%	1/4 = 25%	14/20 = 70%	6/6 = 100%	77/130 = 59%
Total	56/100 = 56%	46/100 = 46%	13/30 = 43%	24/41 = 59%	7/10 = 70%	146/281 = 52%

[a]For each category and marginal total, the numerator is the actual number of survey responses, the denominator is the planned sample size, and the percentage of responses represents the resulting fraction.

APPENDIX II

affected by the response rate. Table 32 shows that the overall response rate was 52 percent, and response rates were generally acceptable for all categories of financial need and validation status.[3] However, response rates fell short of 100 percent, so that statistical adjustments to eliminate nonrespondents (in accordance with their probability of being selected for our survey) brought our respondent population at the community college to 788 1983-84 Pell grant recipients.

Finally, as table 33 shows, the differences between respondents and nonrespondents were generally not great. For

Table 33

Community College Student Survey Sample: Differences Between Respondents and Nonrespondents

	Respondents (n = 146)	Nonrespondents (n = 135)
Average eligibility	416	313
Number of recipients[a]		
Dependent	79	68
Independent	66	66

[a]Information was missing for 1 respondent and 1 nonrespondent. Thus, the number of dependent plus independent recipients in this table is 1 less than the actual total for each category.

example, the average eligibility for nonrespondents was 100 student-aid index points higher than the average eligibility for nonrespondents. However, given that the range of the eligibility scale was 0 to 1,600, both respondents and nonrespondents had, on the average, very high need. Further, of each group about half consisted of dependent students and half of independent students.

Traditionally black institution student survey

The traditionally black school was a private, 4-year school with a long history of enrolling blacks as the great majority

[3]The response rates for all three student surveys were better than the response rate of 30 to 40 percent that is typical of student populations.

Table 34

Traditionally Black College Student Survey Sample: Differences Between Respondents and Nonrespondents

	Respondents (n = 154)	Nonrespondents (n = 115)
Average eligibility	479	429
Number of recipients		
Dependent	126	85
Independent	28	30

of its student body. We chose this school because of these characteristics and because of the special policy interests in the effects of federal initiatives on schools of this type and the educational opportunities of their students.

This school had 1,533 Pell grant recipients in 1983-84, and our planned sample of 269 students was designed to be representative of this group. As with the community college, sample size for the traditionally black school was determined primarily by our resource limitations and our concern about response rates. The sample was stratified on validation status with its two levels, validated and nonvalidated students.[4] The final representativeness of the sample was affected by the response rate. The overall response rate was 57 percent (154/269), and the response rates of 55 percent (94/170) for validated students and 61 percent (60/99) for nonvalidated students were adequate for both subgroups, so the basic structure of the sample was maintained. However, since the response rates fell short of 100 percent, statistical adjustments to eliminate nonrespondents (in accordance with their probability of being selected for our sample) brought our respondent population to 848 1983-84 Pell grant recipients. Table 34 shows some differences between respondents and nonrespondents, but they were generally not great. For instance, on the average, respondents and nonrespondents had very high need.

Private university student sample

The private university, serving a national population, has a long-standing policy of validating all its recipients of

[4]The automated record-keeping systems at this school and the third school in our student survey were not detailed enough to permit the sample stratification we were able to use at the community college.

Table 35

Private University Student Survey Sample: Differences Between Respondents and Nonrespondents

	Respondents (n = 124)	Nonrespondents (n = 109)
Average eligibility	491	469
Number of recipients		
Dependent	95	72
Independent	29	37

financial aid, and it validates more items on Pell applications than the Department requires. We chose this school for our student survey primarily because of this policy.

This school had 469 Pell grant recipients for 1983-84, and our planned sample of 234 students was designed to be representative of this group. As with the two other schools, sample size was determined primarily by our resource limitations and our concern about response rates. The sample was not stratified, because the school validates all applicants for aid. Therefore, we drew a random sample of half of the 1983-84 recipients. The final representativeness of the sample was affected by the response rate, and we did not generalize to the nonrespondents. The response rate was 53 percent, and statistical adjustments to eliminate nonrespondents (in accordance with their probability of being selected for our sample) brought our respondent population to 248 1983-84 Pell grant recipients at this private university. Table 35 shows some differences between respondents and nonrespondents, but the differences were generally not great. Students in both groups were, on the average, highly in need of aid. Similarly, both groups consisted primarily of dependent students although there were more dependent students among the respondents (77 percent) than among nonrespondents (66 percent).

Applicant survey

Our sample of 300 applicants was designed to provide exploratory information about the 434,714 applicants for 1982-83 who were found to have the greatest eligibility for a Pell grant but never received one. The sample was stratified on validation status with its two levels of validated and nonvalidated students. The sample was divided equally between these two groups: 150 applicants had been selected for validation, and 150 had not.

The sample was drawn according to our specifications by System Development Corporation, the Department's former Pell

grant application processor. We anticipated problems in finding respondents because we had planned to survey this group by telephone but the processor's records contained only a 2-year-old address list. Therefore, we asked for a random sample of 2,000 high-need applicants, 1,000 selected for validation and 1,000 not. Then we randomly drew a survey sample of 300 from this group, reserving the remaining 2,700 for substitutes for individuals in the sample of 300 who could not be located.

We encountered even greater problems than we anticipated in finding telephone numbers and completing interviews with applicants. The sample of 300 was quickly exhausted, and when repeated attempts to locate 1,084 of the applicants from the first-stage sample of 2,000 yielded only 42 completed interviews, we terminated the survey. This was not a sufficient number to permit any sort of generalization, even the most exploratory, but the 42 interviews did provide some information about eligible nonrecipients.

SURVEY METHODS

We developed three different questionnaires for our six surveys and tested them in the field. (Copies are available on request.) One mail questionnaire was used for the primary and supplemental institutional surveys, and another was used for the student surveys at the community college, traditionally black school, and private university. The third was the telephone questionnaire.

We made several attempts to reach the nonrespondents to our mail surveys and encourage them to return the completed questionnaires. For instance, we called institutions that failed to respond to the primary institutional survey three times. Similarly, we called students who failed to respond to the three student surveys at least three times, usually five or six times.

All returned surveys were checked for errors and missing data before being coded and keypunched for computer analysis. Where necessary, we called respondents in order to correct errors and collect missing data. Coding was double-checked, and after the data were keypunched, we used the computer to check again for errors.

STATISTICAL METHODS

All six survey samples were drawn randomly from their populations. We used lists of random numbers to draw five of the samples but not the sample of students from the private university, for which we selected all 1983-84 Pell grant recipients whose Social Security numbers ended in an odd number. This procedure is as random as using a random-numbers list and has the advantage of saving time.

APPENDIX II

We weighted the data from our primary institutional sample and our three student samples in order to project sample data to each population and make estimates for and draw conclusions about the populations rather than just the samples. We computed confidence intervals for key population estimates, each interval providing an upper and a lower boundary for the population estimate, given the particular structure of the sample used to develop the estimate. (The intervals are available on request.) We took the size of the intervals into account in our analysis and interpretation of the data.

ERROR RATES USING LESS STRINGENT DEFINITIONS

Table 36

Absolute Error in 1982-83 Pell Grants Treating Cases with Missing Documents as Eligible and Using $100 Error Tolerance[a]

	Programwide estimates			
Source	Total error (million)	Error as % of all $ awarded[b]	Recipients with error	Mean error/ recipient with error
Institutions	$202	8%	17.2%	$463
Students	327	13	27.3	474
Total	$530	22%	40.4%	$518

[a]Data are from the Department of Education. Table includes all overawards and underawards added together, without allowing them to offset each other within a single case or in the aggregate. Error is defined as a discrepancy of plus or minus $100 from the best award. Totals may not add because of rounding.
[b]1982-83 Pell awards totaled $2.4 billion.

Table 37

Student Error in 1982-83 Pell Grants Treating Cases with Missing Documents as Eligible and Using $100 Error Tolerance[a]

	Programwide estimates			
Error	Total error (million)	Error as % of all $ awarded[b]	Recipients with error	Mean error/ recipient with error
Underawards	-$ 52	2%	5.3%	-$389
Overawards	275	11	22.0	494
Total	$327	13%	27.3%	$474

[a]Data are from the Department of Education. Error is defined as a discrepancy of plus or minus $100 from the best award.
[b]1982-83 Pell awards totaled $2.4 billion.

Table 38

Institutional Error in 1982-83 Pell Grants Treating Cases with Missing Documents as Eligible and Using $100 Error Tolerance[a]

	Programwide estimates			
Error	Total error (million)	Error as % of all $ awarded[b]	Recipients with error	Mean error/ recipient with error
Underawards	-$103	4%	10.0%	-$411
Overawards	99	4	7.3	536
Total	$202	8%	17.2%	$463

[a]Data are from the Department of Education. Error is defined as a discrepancy of plus or minus $100 from the best award. Totals may not add because of rounding.
[b]1982-83 Pell awards totaled $2.4 billion.

DECISIONS ON VALIDATION AND DATA NEEDS

To find out whether the Department uses evaluations of its validation methodology regularly to improve its approach, we looked at the available data and their role in decisions. We looked especially closely at the statistical soundness of the Department's methods of selecting students for validation. To begin, we determined the major decisions that validation requires and, for each decision, developed a list of implied questions that could be answered by data and its analysis. For example, the Department has to decide which application items to validate. To decide this, it would be useful to know what items are often wrong, by how much, and why, as well as the payment consequences of the errors and the likelihood that the verification of an item will reduce the error.

Table 39 shows six decisions and the related questions that could usefully be answered by data and analyses. The decisions are what application items to validate, what evidence to require, what margin of error to tolerate, whom to choose to do the validation work, how many applications to validate, and how to target applications if it has been decided not to validate them all. The decisions might at first be based on informal data and observations but could be refined and adjusted as systematic research and evaluation data suggest more valid answers to the basic questions.

Table 39

Decisions About Validation and Related Useful Data and Analyses

Decision	Useful data and analyses
1. What application items should be validated?	What items are often wrong and by how much? Who makes errors in each item? Why? What are the consequences for awards? What is the likelihood that validation will diminish error?
2. What evidence should be required for comparison to application items?	Is evidence easier to get from some sources than others? Do different sources of corroboration differ in credibility? Does the use of some sources require more difficult technical knowledge or calculation than others? Do legal or privacy considerations affect some sources?
3. What margin of error, or discrepancy between original data and validation evidence, should be allowed?	If some discrepancies are overlooked, how much award error should go uncorrected? Consider both dollars allocated in error and the savings in processing costs by not doing some corrections.
4. Who should do validation?	What are the costs and quality of validation at alternative providers? Should effects other than costs be considered in choosing providers?
5. How many applications should be validated?	What are the costs and effectiveness predicted for validating different numbers of applications and items? What is the relationship between number validated and the deterrence of error?
6. If not all applications are to be validated, how should the targeted ones be chosen?	What are the comparative costs (in time, analytic effort, and implementation) and the results of alternative selection methods? Do patterns in errors permit efficient use of error-prone profiles as a main selection method?

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We discussed with officials of the Department and its research and application-processing contractors how these validation decisions have been made and the data and analyses that were used in the decisions. Although on-campus validation has been required for some Pell grant recipients since 1978-79, we found extensive gaps in the information the Department has for improving the process. For example, to judge any particular set of decisions about validation parameters, the Department lacks strong predictive data on the costs of implementation or the likely effect on error. For another example, the Department uses four different criteria or sets of criteria to select applicants for validation and changes them frequently, but it has weak data to judge their relative effectiveness.

In the rest of this appendix, we present our analysis of the data that were available to the Department in 1984 for answering the questions on the right side of table 39. In general, the Department did not have systematic data that would fully answer most of the questions and hence based its decisions on the six issues on less formal information. The limited effect of validation may result in part from imprecise targeting, itself a result of incomplete data and analyses.

THE ITEMS TO VALIDATE

Choosing items for validation among the dozens on the Pell application is the initial decision in the eligibility verification process, and numerous criteria are relevant. The basic research data on application error that we describe in chapter 3 show items that are often wrong and the nature of the discrepancies. The research permits a rank-ordering of application items according to the frequency of error and estimated overpayments and underpayments. However, validation is a questionable response to some kinds of discrepancies, and even where it is appropriate, it will not always produce dollar savings equal to the amount of error found in the research.

For example, the items on dependency status are associated with the greatest consequences of error in terms of payments and are, therefore, an attractive target for validation, but there are numerous problems in verifying answers to the six separate questions on dependence. As presently worded, some are probably unverifiable (as discussed in the section below on sources of evidence).

Further, validating items that the research ranks high in terms of dollar error may raise unrealistic hopes, since the Department may require that schools use different information sources, at different times of the year, from those the research was based on. Different procedures will discover different degrees of error. The data the Department has do not go much beyond the basic error findings and are therefore of little help in analyzing the likely results of selecting given items for validation. (In chapter 4, we discuss the Department's signif-

icant overestimate of the potential savings from validating adjusted gross income in 1982-83.)

THE EVIDENCE TO REQUIRE

Since validating an application item means comparing it to some sort of evidence, the Department must decide the sources of evidence to use and who is to obtain it, whether the processor, the schools, the students, or some combination of these. Typically, the evidence has been paper documents provided by students. Choosing sources of evidence could also entail evaluating alternative sources on criteria such as how easy the evidence is to obtain and use, its credibility, and the legal or privacy considerations that affect its use.

The importance of evaluating alternative sources lessened in 1982-83, when the number of items to be validated was reduced to two, both verifiable from federal income tax returns. Financial aid officials responding to questions in our national survey about problems obtaining and interpreting tax forms showed no widespread concern. However, validating other income and asset items could be complicated and time-consuming for applications from students whose families have complex household finances, if financial aid officials take seriously the Department regulations that require schools to use all available information in examining a student's entire application, including a full review of a tax return and its schedules, if these are submitted. Officials did report that documents beyond the tax form were often difficult to obtain, although the students we surveyed at three schools did not report having this problem to the same extent. Before 1982-83, a wider range of proof was required, but the Department had generally not gathered evidence to weigh alternative forms of documentation on the criteria we noted above. This issue will arise again if the Department decides to increase the number of validated items.[1]

The wording of some of the application items may allow no practical source of corroboration. For example, it appears that no evidence would be adequate to verify answers to some of the questions on dependence. Negative answers to the two questions asking whether a student lived or will live with parents for

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[1]After we drafted our report, the Department published regulations requiring validation of six items in 1985-86. An applicant selected for validation must provide several kinds of evidence, but a signed statement is acceptable in several cases. The regulation and accompanying text do not explain the Department's choice of forms of evidence or the extent of error likely to be removed by requiring only signed statements for support of some items. Institutions can ask for more evidence beyond a signed statement if they have reason to doubt the student's information on several items. (See 50 Fed. Reg. 10710 (March 15, 1985).)

more than 6 weeks and whether the student has received or will receive more than $750 for support from parents are probably unverifiable. Decreasing error by validating these questions may depend on changing the wording to ask, for example, whether the applicant maintains an independent residence for most of the year, the type of question that could be documented from rent receipts, utility bills, and the like. The Department's validation of this item through 1981-82 asked for no proof but simply signed statements from both applicants and their parents that the answers to the six questions on dependence were true. This requirement probably increased accuracy only modestly, especially since half the questions were about an entire year but the statements were collected in the summer or fall.

THE MARGIN OF ERROR TO ALLOW

Another decision is the discrepancy to tolerate between information on an application and the evidence used to verify it. Setting tolerances permits some error to go uncorrected, on the grounds that costs to applicants, schools, the Department, and the processor should be minimized where the payment consequence is small. Department officials told us that they had discussed among themselves the issue of tolerances for errors discovered in the course of validation and that they had argued with OMB officials who believed that the established tolerances should be tightened. However, these discussions were without the benefit of adequate data and analysis and relied on impressions and general estimates of how much error could be permitted in application items being validated without affecting the amount of an award.

Therefore, specific tolerances for individual items and for the overall application have been based on informal analysis, without adequately forecasting the effects of various margins of error. The study of 1982-83 error showed that these estimates were inaccurate and that current tolerances neither eliminate all inconsequential corrections nor require the correction of all consequential application errors. Had correction been required, the eligibility of 72 percent of the applicants with errors within tolerance would have changed, and two thirds of these changes would have yielded net payment changes of $26 million.

WHO SHOULD DO VALIDATION

Decisions on who should compare applications to supporting evidence should be based on data on the costs of the work and on any differences in the quality of validations by different organizations. In 1981 and 1982, as the greatly expanded validation plans were made (first for 100-percent validation by the processor and then for either 100-percent validation or less by schools), the Department had little data on Department, institution, or processor costs. Since then, the Department has not made efforts to gather data on the cost of the chosen approach

or its alternatives. The Department's research contractor for the study of 1982-83 error told us that the Department deleted survey items on campus costs, so that only general questions on school officials' opinions about effort and its burden remained in the survey. In our own survey, we found that such statements are useful but do not substitute for more reliable information gathered through detailed research methods.

The Department lacks information on the quality of validation also. The Department's error research has not examined validation practices in detail and has not been designed to allow precise estimates of either different error rates or the effects of promising practices at different types of schools. This type of information would be useful in deciding whether the schools or someone else should do validation and whether different types of schools should be given different instructions for the work. Since verification of eligibility and analysis of need are done in other federal programs, their experiences and data might suggest alternative approaches to the question of who should do verification, but we found that the Department has not explored these very much, believing that the educational setting of the Pell program makes it unique.

THE NUMBER OF APPLICATIONS TO VALIDATE

Since not all applications have error (see table 20 for the percentages of recipients with various kinds of application error), increasing the proportion of validated applicants may reach a point of diminishing returns.[2] To decide the proportion to validate, it would be useful to be able to predict the overall efficiency (including costs and results) of different versions of validation, considering different numbers to be validated along with variations in other parameters such as specific items to validate. However, the Department does not have an explicit model for deciding the number of applications to validate. Shortcomings in the available data on the costs of validation and on the effects of targeting particular items would make it difficult to develop the integrated model that would be necessary.

The practical decision is how many applicants the processor should select for validation, since the number of applicants who are finally validated cannot be controlled by the Department under the current design. Over the years, the Department has used several different selection methods (see table 23). Department officials told us that, in the absence of a model, they do two rough analyses. Referring to past experience with the various methods of selection they have used, they predict the numbers that will be selected with the methods planned for

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[2]Despite this, the Department did propose 100-percent validation for 1982-83, justifying it chiefly on the grounds that explanations to students and families would be simpler if everyone were targeted rather than selected individuals.

the coming year. They examine the predicted numbers informally to see if these will be acceptable to the higher-education community and to estimate, by rule of thumb, the dollar savings that can be expected. (The "rule" is based on observation of decreases in eligibility in past years after corrections have been submitted by applicants selected by each method. We evaluate this estimating tool in the next section.) If the dollar estimate "doesn't seem high enough" to senior department officials, then the number of applicants planned for validation may be increased, either by adding entire selection methods or by increasing the rate at which students are to be chosen randomly. This rate is also changed sometimes during a year, if actual selections are running below the projected figures.

Random selection requires choosing a selection rate--for example, instructing the processor to select every fiftieth application, which would be a 2-percent random sample. The Department uses the applications in this random group as a comparison group for studies of the other methods of selecting applications, and it believes that public awareness of the chance of random selection helps deter applicant error. However, the Department does not have strong data on which to base the specific choice of selection rate and total number to be chosen randomly. We found no statistical study designs specifying the random sample sizes needed for valid comparisons for evaluating the different methods and no data on the relationship between numbers selected for validation and deterrence. This weak rationale was the basis for the planned selection of 152,000 applications for validation in 1984-85.

APPLICATION SELECTION METHODS

For 1982-83, the first time since validation began in 1978-79, the Department proposed 100-percent validation, but the Congress rejected the proposal, stating that the funds authorized for validation in 1982-83 should instead be "targeted toward validation of those applicants who statistically are most likely to be in error."[3] The Congress also directed that selection be replaced with 100-percent validation beginning in 1983-84, but the Department has not done this and has continued to select only a fraction of the applications. We examined the statistical characteristics of the Department's selection methods and whether the Department has data to evaluate and improve these methods.

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[3]U.S. House of Representatives, Conference Report to Accompany H.R. 5922, Report 97-605, 97th Cong., 2nd sess. (Washington, D.C.: June 10, 1982), p. 5. H.R. 5922 was vetoed by the president, but the Department's provisions were included in a revised bill that was enacted, and the earlier report language on the provision was reaffirmed in the final conference report. (See Conference Report to Accompany H.R. 6855, Report 97-632, 97th Cong., 2nd sess. (Washington, D.C.: July 14, 1982), p. 18. See also table 26 for a chronology of the legislative events.)

If an application is internally consistent and arithmetically correct, there is no way to detect further errors. Thus, selection for validation is either a random choice or an exercise in prediction, an educated guess that an application contains error. The Department has developed a set of patterns or combinations of application data that it believes, given experience over the years, are suspicious and justify selecting for validation any application that matches a predetermined pattern. (The validation of applications is not linked to patterns that arouse suspicion but is, rather, for the most part a uniform process for all selected applications in which items in a standard set are verified. Thus, the Department faces two separate sets of decisions in establishing selection methods and in setting the specific items to be verified on all applications chosen for validation.) We found statistical problems with both of the Department's selection methods--random choice and the patterns, or "preexisting criteria."

The Department's "random selection" method does not produce a true random sample for two reasons. First, students applying at different times in a year have unequal probabilities of being chosen if the Department has adjusted the selection rate (as discussed in the section above) because the processor's production statistics show that fewer applications are being selected than predicted (as can happen once or more during the course of a year). The resulting group is not truly random. Second, what is chosen is not applications but transactions. Each correction an applicant submits is considered a transaction, and the processor makes random choices from the set of all transactions. Applicants whose files contain multiple transactions therefore have a higher probability of being selected for validation, which also violates the rule in random sampling that all units have equal probability of being selected.

In the other selection method, called "preexisting criteria," the processor checks applications against numerous separate data-patterns that have been developed by the processor and Department staff. The criteria are not based on statistical analyses of applications with error; they are drawn from informal analysis and hunches about suspicious combinations of application data. The list of criteria has been changed over the years, essentially by trial and error, by inspecting the corrections of eligibility and retaining criteria that are associated with reduced eligibility.

Two selection methods used for the first time in 1983-84 entail "cross-year comparisons" and an "error-prone model." "Cross-year comparisons" are made only in considering the applications of students applying for a second or subsequent Pell grant. The Department compares the prior application and the present one and selects for validation those that show suspicious patterns. As with the "preexisting criteria," the patterns observed between the 2 years may not, after all, depict errors. The method is based not on the statistical likelihood

of error but only on a presumption that the specified pattern (such as identical data for some item in both years) is likely to be a mistake.

The "error-prone model" is the only selection method based on data showing the statistical likelihood that an application contains an error; it represents an approach we have encouraged in other agencies that use it. The Department's model is based on the findings from the error research, and it attempts to use all the data on an application (rather than just a few items, as with "preexisting criteria") in order to predict the probability of error. We did not review the adequacy of the particular model the Department uses. We have noted in chapter 4 that despite the model's stronger statistical basis, its use has been delayed because of disagreement within the Department over its value. The Department put the error-prone model aside in 1982-83 in favor of 100-percent validation. When the Congress rejected total validation and requested a targeted approach in midyear, there was not time to ready the processor's computers, so the targeting was done with the familiar "preexisting criteria." The Department began using an error-prone model in 1983-84 in addition to other methods, not to replace them.

The Department lacks strong data to support its decisions about its selection methods. These decisions are made in the fall, when planning for the next year's application processing begins. The limitations of the decisions are the result of drawing conclusions from cross-sectional data and a weak measure of validation's comparative effect on nonequivalent groups.

The "cross-sectional" data are weak because the year is still in progress when selection methods are evaluated in the fall, and information collected at that (or any) particular point in a year may be misleading: different students with different educational plans and financial aid needs apply at different times of the year. For example, staff at the Department's previous processor told us that applicants in the first part of the processing year are generally from 4-year colleges and universities that have a policy of selective admission or early deadlines for making decisions on financial aid for the coming year. Eligibility on the student-aid index tends to be lower among this group than among groups applying in other parts of the year, and their applications come primarily through the multiple-data-entry processors. Later in the year, applicants are more likely to apply directly to the Pell processor, seek admission to community colleges and proprietary schools, and rank higher on the eligibility scale. An evaluation of the effects of validation will be misleading if it is drawn from data spanning only February of a year when processing starts through the early fall, when decisions on the next year's selection methods are made.

The Department uses a weak measure to compare the results of the different validation selection methods. It would be

useful to know the dollar value of corrections: How much did an award change as a result of corrections stimulated by validation? And is there any difference in the degree of change among those chosen in different ways? But the Department does not know the payment consequence of any correction. It substitutes the more ambiguous measure of the change in eligibility observed after the correction of application data. The processor provides the Department with periodic tables showing, for each selection method, how many applicants have been selected and the average change in eligibility that has resulted from the corrections submitted by those in each group. For example, the Department might observe that there is a greater decrease in the eligibility, after correction, of those selected up to that point in the program year by the "preexisting criteria" than for those selected by the "error-prone model." An observation like this might be taken as evidence that the former method is superior.

The limitations of this measure for evaluation are numerous. Most importantly, eligibility change is only a rough guide to the dollar consequences of a correction, since factors other than eligibility also enter into the calculation of an individual award, including the cost of the specific school attended and enrollment status. Further, the evaluation incorrectly assumes that the change in eligibility that is observed for each group can be attributed entirely to corrections stimulated by validation. Corrections can occur for many reasons. An examination of eligibility change also does not reveal anything about whether it is validation of the specific items chosen in that year that is having the observed effect. The corrections that produce the change in eligibility may be of data items other than the ones chosen by the Department for that year's validation.

There is, finally, one other reason why the Department may conclude improperly that one selection method is better than another, since the groups of applicants it compares are not equivalent. An accurate estimation of the result of using several different methods requires knowing how well the methods compare in selecting from a norm, or a typical group of applicants, but the Department directs the processor to apply the selection methods in a specific order. For example, the Department may require the processor first to select all applicants who meet certain "preexisting criteria," then to apply the "random selection" methods, and finally to review the remaining applications using the "error-prone model." This means that the pool of applicants from which some are selected with a method given a lower priority will be different from the pool available for review with a method given a higher priority, which in turn means that the results of any comparison will be inaccurate to an unknown degree.

SUMMARY

Although the Department has useful data on the extent of error in specific application items, the decisions it has to make

on the design of validation as a response to errors are not supported by strong data and analyses. For some items, analysis may show that validation cannot be effective, given the time of year and the types of evidence that are available when school officials carry out validation. The data that are available are incomplete, and in some cases misleading, for evaluating past validation decisions and for looking ahead to consider the advantages and disadvantages of options such as validating different items, requiring different evidence, applying other tolerances, or validating elsewhere than in the schools numbers of applications selected by other methods. Our main conclusion is that the Department should consider other strategies beyond validation for their potential ability to curb Pell error. The current validation strategy could clearly be strengthened by improving the data and analysis.

THE COSTS OF VALIDATION

The Department spent approximately $5.5 million on validation and related activities for the period 1981-83. Adding to this the average institutional cost of $14 per validation for the 1.98 million students selected for validation in 1981-82 and 1982-83 would make direct and indirect costs of validation total less than 1 percent of the amount awarded in Pell grants in these 2 program years, or an even smaller percentage of the total cost of the overall Pell program. In 1982-83, at an average cost of $14 each, the 1.66 million validations the Department required cost schools an estimated $23 million.

This estimate of $5.5 million takes into account the Department's costs at headquarters for performing validations for students attending schools in the alternate disbursement system, the administrative costs (planning, research, training, program reviews, and the like) associated with overseeing the validation that schools in the regular disbursement system do, and the Department's costs for validation tasks done as part of the application-processing contractor's work (see table 40).

Our data on the Department's headquarters expenses are for October 1, 1981, through September 30, 1983. This period includes most of the Pell grant program years 1981-82 and 1982-83, or the year before and the year of expanded validation. The number of validations done at the Department increased from 2,764 in 1981-82 to 12,885 in 1982-83. The Department's costs

Table 40

The Costs of Pell Validation at the Department of Education and the Processor in 1981-83 (in Thousands)

Cost	1981	1982	1983	Total
Headquarters[a]				
Performing validations		$205	$ 295	
Administering national validation policy		476	719	
Total		$681	$1,014	$1,695
Processor[b]				
All validation-related activity, indirect costs, and fees	$531	$2,237	$1,046	$3,814
TOTAL				$5,509

[a]Data are for fiscal years.
[b]Data are for calendar years.

also increased, largely because of the expenses of the research study of errors rather than operating costs in performing validations. To obtain the Department's costs, we asked the Department to provide figures for various specific expenses of performing validations and overseeing schools' validation. We accepted the Department's estimates of staff time and statements of salaries and other expenses. We computed personnel costs from data the Department provided on salary and time estimates.

Our data on the costs the Department incurred at the application-processing contractor cover calendar years 1981-83, a longer period than for the Department headquarters data. Calculating the processor's costs required both direct and indirect methods. Expenses such as the costs of programming computers to carry out the Department's selection criteria and producing management information reports on validation selections are clearly attributable to validation. The main cost of validation is the processing of corrections that school officials require after reviewing the validation documents. Since we had no direct way of determining the volume of corrections that resulted from validation alone, we developed an indirect method.

We requested that the processor sample several hundred corrections in each of 3 program years and calculate for each sample the fraction of corrections that came from applicants who had been selected for validation and that were dated after the notification that they had been selected. We assumed that all corrections submitted after the notification date resulted from validation (or from the warning that it would be required before granting awards). In 1981, only 4.9 percent of the corrections were of this type, according to the processor's sample study; the proportion rose to 26.1 percent in 1982 and fell to 14.1 percent in 1983. We directed the processor to use a sample of corrections in each year large enough that the sample results could be projected to the total volume of corrections (within the limits of statistical confidence) for an overall estimate of the validation-related work load in each year. We gathered data at the contractor's offices to estimate the overall costs of processing all corrections in each year, and then we used the fractions described above to calculate the portion of those costs attributable to validation.

To obtain a figure for the cost of the program that we could compare to validation costs, we added the Department's total outlay for student awards, payments to institutions for the administrative allowance, the total price of the application-processing contract, and payments for the services of multiple-data-entry processors. We did not estimate the Department's overall administrative costs for the Pell program. Doing so would have made validation's fraction of the program costs even smaller.

ALTERNATIVE PRACTICES FOR MAKING ACCURATE AWARDS

In this appendix, we outline current practices at six stages in awarding Pell grants and discuss alternatives that the Department could explore. The six stages, shown in table 41, cover the Department's basic activities of defining need, obtaining data on individuals, verifying that the data are accurate, and working with the higher-education institutions that carry out administrative tasks for federal student aid. Alternative practices are possible throughout this sequence.[1] We focused on application

Table 41

Pell Grant System Practices and Alternatives That Could Improve Award Accuracy

Step	Practice	Alternative
Need analysis	Need determined from data on past year and estimates of year for which award is to be made;	Use base year only;
	Educational need stands alone, not linked to other benefits	Substitute eligibility for other need-tested benefits
Data required for need analysis	Maximum data gathered for characterizing family situation, resulting in complex data not necessarily high in quality	Simplify need analysis to use fewer and more reliable data elements
Application methods	Single paper form for an applicant;	Different forms for different situations;
	Uses unique terms and definitions;	Use standard definitions (e.g., IRS terms);
	Asks for aggregate data;	Ask for specifics;
	Mailed to processor	Direct entry to automated system
Data verification	Selective (students, items);	More comprehensive;
	Done at schools;	Done centrally;
	Comparisons of data on paper;	Comparisons of data by computer;
	Before first installment of award	After first installment of award to permit correction by second installment
Resources and support for institutional effort	Administrative allowance without clear basis for amount;	Explicit cost sharing based on formal study;
	Training gives modest attention to issues of quality	Explicit training on award quality control
Oversight of institutions	Limited program review;	Local monitoring;
	Occasional national research studies;	Regular data;
	No goals or targets nor link to incentives	Establish error-rate targets linked to incentives

[1]We discussed 13 issues about determining eligibility for federal benefits and alternative approaches to them in Eligibility Verification and Privacy in Federal Benefit Programs: A Delicate Balance, GAO/HRD-85-22 (Washington, D.C.: March 1, 1985).

and verification activities since applicant error was the main subject in most of our review. We did not develop a complete analysis of current and alternative practices for other stages the schools perform, such as reviewing nonfinancial eligibility criteria, calculating and disbursing awards, monitoring academic progress, and making refunds.

ANALYZING NEED

The basic policy choice in designing a method for analyzing a student's need for financial aid is the complexity of the data that are to be used. Considering data on more factors and being able to measure them closer to the period of enrollment in post-secondary school may mean a more accurate estimate of need. But the same qualities that make information more sensitive to family differences and how they are expected to change may make the analysis more vulnerable to measurement error. For example, computing need from data on circumstances expected for the year in which a grant will be used, rather than from data on the previous year, allows for anticipated financial changes from the expected birth of a new family member or the first-time enrollment of several family members in school at once. But the effort to increase the sensitivity of the analysis by using forecasts creates the possibility of greater error in making awards, since a forecast may prove wrong.

The Department's current practice is to combine data from a past "base year" with estimates about conditions that will affect an applicant's family expenses and resources during the period in the coming year when the award will be used. For example, an applicant for aid for 1984-85 would have been asked during the early months of 1984 about financial details of the fully completed year 1983 as well as conditions expected in 1984 and, for some topics, through June 1985.

The forecast items the Department asked for included three questions on dependence: whether the Pell applicant would live with parents for more than 6 weeks in the full calendar year 1984, would receive more than $750 in support from them, and would be claimed as a dependent on a parent's 1984 federal income tax form to be filed in 1985. Household size was also to be estimated for July 1984 through June 1985, and so were the number of family members who would be in postsecondary schools during this period and income and other financial details for the parents and students for 1984 and part of 1985. The Department required these data in an attempt to determine need from comprehensive figures.

The Department's research data on error rates, however, suggest that, if the objective of more accurate awards is to be emphasized, one alternative is to reconsider such data elements and the broader policy of making comprehensive need analyses from multiyear data. Of the four greatest sources of inaccurate data (with payment consequences) in 1982-83 applications, three were

the partly or completely prospective items on dependency status, household size, and number enrolled in postsecondary education (see table 20). Problems of proof for these items make it uncertain whether increasing validation will correct them.[2] An aid in reconsidering the current approach would be to analyze various existing data bases on Pell applicants and recipients to see what changes in awards would be likely if need analysis included only data from the preceding year.

A second alternative is to simplify the determination of eligibility for Pell awards by allowing eligibility for some other benefit program to substitute for a separate determination. There is precedent for this in the recent decision of the Food and Nutrition Service of the Department of Agriculture to omit verifying the eligibility of applicants for free and reduced-price school meals who can provide a number showing that they are eligible for the Food Stamp Program. Technical analyses are needed that would consider the problem of using the eligibility determinations that are made monthly or quarterly in different ways by different programs, since Pell is an annual program. However, exploring the alternative of using common eligibility seems reasonable in view of the extensive efforts other benefit programs make to gather and verify data in order to assist low-income families, some of whom include individuals who are likely to apply for educational assistance.

REQUIRING DATA

Views are diverse on how extensively information should be gathered, even if need were to be analyzed from data for only 1 year. Officials of the application processor and others in financial aid told us that they believe campus officials generally prefer to see as much data as possible about applicants, even though those data vary greatly in quality. The objective of gathering data from applicants is, of course, to make awards that meet the students' needs as much as possible by taking into consideration as much detail as possible on family circumstances--income, assets, expenses, and so. Many data elements in the Pell grant formula and, therefore, on the application are set by law.

However, in light of the continuing problem of inaccurate awards, an alternative is to consider simplifying the requirement for the data that are used in the analysis of students' need. This would permit simpler application forms and instructions,

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[2]Dependence might be verified most easily by examining the federal income tax returns of the parents of independent applicants to see if they are claimed as dependents. The Department believes it now has legal authority to do this in certain cases only. This issue could be clarified by the Congress in the legislative reauthorization.

which in turn might elicit more accurate information from the applicants and their families. Eliminating prospective data is only one kind of simplification that could be considered.

Nontaxable income could also be examined from this perspective, since it is a significant source of inaccuracy (see table 20). The instructions are complicated for this item: for the 1984-85 application, up to 18 blanks had to be filled in on a separate worksheet, and a total had to transferred to the main part of the form. We suggest this data element be reviewed because of its complexity and the history of error associated with it. A review of a variety of income and asset questions, among others, might inspect the balance between an item's importance for equitable awards and its history of inaccuracy.

Decisions about considering and adopting alternative larger or smaller sets of data for need analysis would have to be based on their direct and indirect effects on the program's budget, their redistributive effects on groups of recipients, and the efficiency of administrative work with specific data elements. The Congress in past years has rejected several Department proposals for simplifying the need analysis, but the continuing problem of inaccurate application data may call for a reconsideration of the possibility of making awards from a simpler set of data.[3]

IMPROVING THE FORMS

Even if it is not feasible to prevent error by making the major simplifications suggested in the alternatives described above, it might be possible to increase data accuracy by improving the way applicants submit their data. Currently, all applicants complete and mail to a processor one of several paper forms, depending on the processor (see the section in chapter 1 entitled "How the Program Works"). In general, the forms ask for a variety of data in language that is idiosyncratic to the field of student financial-aid administration. Department and contractor officials told us that major changes to the federal application form are constrained by computer data-processing routines and the statutory requirement of a common application form for all federal student aid.

As the statutory definition of need has evolved, and as various users of the data have increased their requirements over the years, the federal form has become more and more complex and

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[3]The effects of modifying the Pell grant formula could be calculated with data that are now available. One recent simulation of a much simpler formula showed that few recipients would lose large amounts, recipients losing eligibility under the alternative received low awards, and the neediest students would continue to receive high awards.

has been printed in smaller and smaller type to accommodate more and more questions to the applicant. (The forms supplied by the other processors are even more complex, since they include data requirements set by institutions beyond those needed for determining eligibility for federal aid.) Dependent and independent students are asked to follow different color-coded paths through the form. Although expertise in forms design was available for several years as part of a subcontract with the previous processor, the Department has used it only to a small extent. Department officials could recall only one small field test of alternatives to the present form. We suggest consideration of further alternatives in this area.

One alternative might be to provide separate forms for people in different circumstances, as the Internal Revenue Service does with income tax returns. Radically simplified forms could be used by applicants who have only a few kinds of income to report. Some of the complexity of the present form results from its several questions about types of income, assets, and other financial conditions that may apply to relatively few people. A simpler form that would be useful for a large number of applicants might justify the cost of including alternative forms in a common package. A second modification would be to provide one form for independent and another form for dependent students, to remove the confusion of the color-coded pathways. Some officials believe that gains in simplicity within each of the modified forms might be offset by the complexity of the instructions and questions that would be necessary to help all applicants determine which form to use. This concern, and others such as the added costs of processing multiple forms, show that these simplifications and others require further development, testing, and analysis. Since the common application presently used is established in the legislation, the Congress would have to weigh the merits of multiple application forms at the appropriate time.

The use of separate forms by different groups might make more space available on each type of form. Space limitations on the current form have prohibited several improvements to the application in the past. The items on untaxed income, household size, and number enrolled in postsecondary schools could be less troublesome if space permitted more detailed answers on the form. We noted above, for example, that untaxed income on the 1984-85 application was to be transferred to the form from an aggregate of 18 items on a worksheet included in the application package; these as well as the household data, given now simply as single numbers, could all be itemized directly on the form. Experience in other programs suggests that accuracy improves when applicants not only count family members but also must list their names in answer to a specific question. Obviously, verification is easier if information is itemized directly on the form. Finally, making more space available by differentiating forms might allow more instructions to be printed directly on each form. Some inaccuracy in the current application may result from

students' simply not reading the 11 pages of instructions that now accompany, but are separate from, the form.

The Department does not know much about how applicants fill out the current form--when and how and with what assistance. In studying this subject, the Department might review the experience of other agencies. The housing-voucher and income-maintenance experiments, which tested various methods of closely monitoring household economics, and the Bureau of the Census might be able to share useful information on the conditions under which people provide the most accurate data about themselves. Knowing more about these conditions, the Department might then consider steps to create them for Pell grant applicants.

Even without major changes to the structure of the form, the data it elicits might be more accurate if specific data items were redesigned to use definitions and terms common elsewhere. For example, listing the number of exemptions on the federal income tax return might be substituted for the current Pell grant application item calling for household size. Many other issues are implicit in this proposal. For example, the language of federal tax forms may pose a barrier; some financial aid experts believe that Pell's present practice of using "adjusted gross income" from federal income tax terminology has already had significantly negative side effects. However, in the search for ways to make awards more accurate, the benefit from standardizing the terminology might be weighed with other effects on the program's objectives.

Finally, as technology assists more and more in the administration of financial aid functions, ways may be found to improve not only the application but the application process as well. For example, the direct entry of application data into an automated information system might be possible for students already enrolled at a school and applying for a first or a subsequent award. The validation of data items and correction of eligibility might be performed simultaneously with data entry, shortening many steps of the current process. If an analysis of the distribution of Pell grants were to show a concentration of awards at a small number of institutions, it might be possible to use advanced technology more intensively in administering student aid there, including the calculation of eligibility and handling of corrections after validation. The Department's current voluntary program of data transmission by computer tape shows that at least some schools take advantage of opportunities to benefit from advanced technology; further expansion of this effort could be explored.

VERIFYING DATA

Data are presently verified by school officials' reviewing documentary evidence some students provide for some application items before awards are calculated. Consideration might be given to the selection aspects of this process, especially since the

Congress directed 100-percent validation for all later years in a report accompanying the appropriation for validation in 1982-83. And the possibility of central rather than school-by-school verification might be reviewed again, even though this method has already been rejected several times.

An official at one of the nonfederal processors told us that there is demand from the schools for centralized verification but, as we discussed in chapter 4, consideration of this option in 1981 and 1982 was brief and incomplete. Issues to be explored include how to protect the privacy of federal income tax returns that would be attached to applications, how to verify information from parents and students who are not required to submit returns to IRS, whether to require the supplementary schedules that some people file in addition to the basic tax return, and whether to continue to allow the submission of Pell applications before federal income tax returns have been completed. Central validation almost certainly would entail substantial costs for the processors and some burdens on the applicants, but these might be offset if institutions whose routine validation work load were reduced were able to follow up on exceptions and special cases more easily and to give greater attention to other procedures that affect the quality of awards.

Many of the burdens to applicants, institutions, and the processor in handling paper documents could be relieved by using the advanced automated-information technology that permits the comparison of data by computer-matching. For example, it might be possible for a centralized service to match applicants' data with information on income tax returns on file with IRS.

Computer-matching raises many complex legal, ethical, technical, and practical issues, some of which we are reviewing in a separate study. Our point here is not to try to resolve questions about the feasibility of applying computer-matching to Pell validation but to raise it as a possibility for consideration. Department officials generally believe computer-matching to be impossible for legal and technical reasons, and IRS officials have been opposed to it. The Department has no statutory authority to obtain tax returns from IRS and, in any case, it is believed that IRS takes so long to process tax returns that efficient access could not be had to a reasonably complete central file until school starts late in the calendar year. This might be too late to affect the calculation of Pell awards for many students, especially if the comparison of the application and the tax return on file revealed discrepancies requiring adjustment or correction.

However, these difficulties might not be insurmountable. For example, it might be possible for applicants and their parents to grant access to their tax returns by checking an item on the application, or the Congress might allow access directly by statute. Using the tax system for unrelated purposes has serious implications, but the Congress recently expanded the

permissible data-sharing in order to strengthen eligibility verification in several other programs. If analysis were to show a high probability of significant reductions in error or gains in efficiency, similar permission might be granted for the Pell program. As for the question of timeliness, IRS officials told us that by late summer their central data files include the great majority of individual income tax returns for the prior year. If the Department's data systems were improved to yield up-to-date records for locating at the schools applicants who have become recipients, and if the IRS data were made available on time, it might be possible to match data in the early fall, with the goal of identifying and resolving discrepancies after an award had been calculated and a first payment made but before the second payment.

SUPPORTING THE INSTITUTIONS' ADMINISTRATIVE WORK

Although institutions benefit from the attendance of students who have federal aid, they must perform many tasks in the application and verification processes, in the later stages of calculating and disbursing awards, and in monitoring recipients' academic progress, issuing refunds, and keeping financial records on all transactions. The Department has data on institutional errors that contribute to inaccuracy in Pell awards but little information on the schools' practices in administering Pell grants and other financial aid programs.

Detailed data-gathering on this subject was deleted from the Department's 1982-83 study of Pell award accuracy, even though little or no data had been available for gauging the added effort and costs of the decision in 1982 to place an expanded validation burden on the schools that year. By the time of the Department's 1983 letter to schools proposing that they validate applicants for other federal student aid, the Department still had no cost data, although the proposal required additional institutional tasks such as drawing statistical samples of student records and determining institutional error rates.

Even with the data that are available, the Department draws no composite picture of its relationships with the schools, such as could be done by integrating data from operations, training, program reviews, and research. Because increasing the accuracy of Pell awards may require greater institutional effort, and because of the shortcomings in the analysis of the work required to administer federal aid, we believe special consideration should be given to the development of shared goals between the Department and schools and to alternative practices in supporting schools' efforts to reach those goals.

The Department could consider alternatives in areas of cost-sharing and training. For example, other major federal benefit programs administered by nonfederal organizations permit significant cost-sharing of the expense of administration.

Meanwhile, officials at one federal agency told us that they decided not to require extensive eligibility-verification efforts by local agencies administering their program, explicitly because the agency's budget could not afford to pay them any significant share of the cost. The Department pays a statutory administrative allowance of $5 per Pell grant recipient, partly in recognition of the work entailed in validation, but it has few data from which to judge the adequacy of this payment. (The Department has recommended to the Congress that the allowance be $2.) In the absence of Department data on the costs of administering financial aid, the congressionally mandated National Commission on Student Financial Assistance studied the subject and found that in 1981-82, before the expanded validation requirement, the average cost of administering a Pell grant was about $56 per recipient. We have estimated the average cost of each validation at about $14 (see chapter 2). Thus, it appears that the federal government shares only a small fraction of the cost of administering the Pell program.

Increasing the accuracy of Pell awards may require a reconsideration of not only financial resources but also the skills financial aid staff may need if new objectives and techniques are added to their routine. As we discussed in chapter 4, the Department's training for institutional officials has not focused to any significant extent on issues of quality control. The data that show inaccuracies in student applications even after validation, as well as institutional errors of several kinds, suggest the value of explicit training on quality-control topics for schools' administrative staff. Follow-up data for monitoring and evaluating the effects of the training should probably be gathered. If some institutions have developed effective methods of insuring accurate Pell awards, the Department might consider ways of supplementing training by its regional staff with training by staff from those schools. The schools that enroll the greatest numbers of Pell grant recipients might be allotted special training efforts.

OVERSEEING QUALITY AT SCHOOLS

Department staff visit schools participating in student financial aid programs to evaluate their compliance with policies and regulations (see chapter 4). Their program reviews yield some data on the quality of administrative processes at the schools, but more information and better tools for oversight are needed. An alternative to the limitations of program reviews might combine several elements: regular data from all schools, targets of award accuracy, and incentives for schools to attain the targets. Improved data on award quality, derived from regular operations, could be compared with the targets that had been set, and this in turn could be linked to incentives. Other federal programs such as food stamps and Aid to Families with Dependent Children have extensive experience with similar practices that could be adapted to the special circumstances of education.

Unlike Pell, some federal programs give explicit direction to the administering agencies about acceptable levels of award quality and measure them in a continuous monitoring of indicators of quality. Improvement plans are required when targets are not met. Extensive effort is made to obtain reliable data on the accuracy of the benefit awards made by the administering agencies, and regular quality-control studies of samples of awards at local and state levels are reviewed by federal officials to verify the results. Adopting target-setting and monitoring practices and sharing administrative costs to a greater degree could put the Department in a better position to review with the schools the efficiency of the administrative processes that are carried out with the help of federal funds. The federal share of administrative costs could be adjusted upward, giving the schools an incentive to adopt practices that could better meet or exceed the minimum standards of accuracy for awards.

The experience of other programs with comprehensive quality-control efforts is only suggestive, however, because the historical relationship between the federal government and institutions of higher education differs from that between the federal government and state and local governments administering other programs. Nevertheless, our outline discussion might be useful to the deliberations of the Congress, the Department, and the higher-education community if the institutions are to expand their effort toward making awards more accurate, if the resources and support are to be found for the efforts, and if methods of program oversight are to be improved.

SUMMARY

We found many ideas for improving current practices in the Pell grant program that deserve further study. Ways of increasing the accuracy of Pell awards include redefining the basic concept by which students' need is determined, refining the collection of the data that are used in determining need, revising the methods by which applicants are asked to provide these data, changing the approach to the verification of data, providing incentives to schools to improve efforts toward increasing the accuracy of awards, and improving the resources, support, and oversight the Department gives to the schools that administer the program. Our suggestions are founded on analyses of opportunities for improving the operations of the Pell program and on the experience of other federal agencies facing similar problems in administering programs that base individual benefits on need and disburse them through nonfederal, noncentralized agencies.

The ideas we present meet our criteria of relevance and potential benefit, although our review did not extend to the gathering of conclusive evidence of the merits of the alternatives we have discussed. Many issues of feasibility, cost, technical merit, and acceptability remain to be worked out. The specific alternatives discussed in this appendix supplement the

main conclusions presented in chapter 5 on overall change needed in the goals, strategies, and management of the Department's efforts to improve Pell award accuracy. The Congress and the Department could consider technical alternatives better after clarifying the larger policy issue of the priority that is to be given to accuracy.

AGENCY COMMENTS AND GAO'S RESPONSE

This appendix provides our response to major points raised by the Department of Education and the Office of Management and Budget on a draft of this report. Following our response to the agencies' comments, we have printed the main section of the Department's comments (excluding two appendixes, available on request) and the entire text of OMB's letter.

Neither OMB nor the Department finds factual errors in the draft report, but the Department interprets the evidence differently. The Department believes that its past performance toward Pell grant error has been more than adequate and that current and planned corrective actions constitute an overall strategy that will address the error that can be reduced without legislative changes. We believe that the findings we report in chapter 3 show that the error rate after the Department's corrective action in 1982-83 remains unsatisfactory. Our report notes that legislation simplifying need analysis could help reduce some kinds of error (as we discuss in appendix VI), but we also conclude that the Department could do more within current law.

The Department describes activities and plans initiated since we completed our review. While we agree that more is being done, it is more of the same kind of effort that did not work very well before. We believe that the continued absence of goals, the unclear choice of strategies, and the absence of a plan for improving the data still suggest the need for congressional consideration of both the general issue of giving guidance to the Department about correcting error and the specific issue of the adequacy of the Department's data on error.

DEPARTMENT OF EDUCATION COMMENTS

The Department organized its comments by abstracting five concerns from the report and responding to each one. The five headings below reproduce the Department's wording of each concern, beginning on page 144.

"The Department lacks explicit goals and targets for corrective action on Pell Grant errors."

The Department says that it has in operation and planned a broad variety of initiatives to insure that eligible students get financial aid when they need it. The initiatives include continuing validation, running a pilot test in 1985-86 of institutions' expanded use of electronic data-transmission, and implementing other pilot projects in which institutions develop local quality-control techniques. In addition, the Department says it has begun to redesign the Pell grant application form and that a new form will be introduced in 1986-87.

The Department believes no error-reduction goals are appropriate until long-term management goals have been well established (in part through the pilot projects of institutional quality control). The Department believes that it cannot make much progress in reducing error until the Congress gives it further guidance on resolving the conflict between the goal of a complex, need-analysis system that is sensitive to applicants' circumstances but prone to error and the goal of reducing the complexity of the system in order to reduce its errors. Finally, the Department recognizes that it has implemented error-reducing strategies without devoting adequate time and staff resources to analyzing and testing them in advance. However, the Department also says that its 1982-83 expanded validation was to be a quick effort, requiring institutions to use minimum resources to attain the maximum correction. The Department believes that its continued expansion of validation shows "movement toward a cost/benefit perspective" (page 145) and is consistent with goal-oriented management.

We agree that some of the specific initiatives the Department says will take effect in 1985-86 and beyond appear to be useful steps in improving the Pell grant program, for two reasons. First, the steps respond substantively to points we have identified in our analysis of potentially promising approaches, including the need to revise the application form to prevent error as much as possible and the need to address institutional error much more forcefully and involve the institutions in the process. Second, the Department appears to be committed to making pilot tests of some of its new ideas before implementation, which we have discussed as a useful approach to gathering information and making sound decisions.

However, the Department's presentation of these new activities shows a continuing absence of key elements that our analysis found were missing from initiatives taking place during the years covered by our data. We disagree that goals (in terms of the kinds of error to be reduced) and specific targets (in dollars and percentages) are impossible at early stages of such projects. These new activities and strategies are not clearly linked to analyses of specific kinds of error and the chances that each strategy can remedy those errors. It is not clear that the management of diverse new projects at different points in the Pell grant program will be more successfully coordinated among the divisions of the Office of Student Financial Assistance than projects in the past. The weak evaluation that has made decisions difficult (discussed in chapter 4 and appendix IV) seems likely to be repeated, since we do not see the Department discussing a plan for future data-gathering that will allow the critical evaluation of each new initiative. An evaluation plan should also be tied to a schedule of decisionmaking for long-term implementation to avoid the hasty decisionmaking of the past.

In suggesting in chapter 5 that the Congress consider offering guidance to the Department, we did not mean to imply that the absence of congressional direction is the major barrier to setting and achieving error-reduction goals. We agree that the need-analysis system presently in the law includes some kinds of application information that is prone to error that the Congress might eliminate, if reducing error is a high priority. And we agree that the Department's dedication of major new resources to error reduction is likely only with the agreement of the Congress on the priority of the problem. But we do not agree that the Department can do little in the absence of congressional direction. The initiatives described in the Department's comments seem to argue the opposite. We continue to believe that the Department can set the fundamental directions we suggest in chapter 5 and can then design, test, analyze, and implement a wide range of useful ideas without further guidance from the Congress. We agree with OMB that the Pell error rate is unacceptable, and we believe that the Department should seriously attempt an organized effort to reduce the rate rather than explain it away, await direction, or invest still more resources with little return.

Finally, we are not reassured by the Department's assertion that its further expansion of validation is another corrective action. From our review of the expanded validation in 1982-83 (reported in chapters 2-4), we cannot agree with the Department's characterization of that effort as a "'quick strike'" intended to require "minimal commitment of resources by institutions to produce the maximum error deterring effect" (page 145). The Department knew nothing about the likely costs of the plan, deterrence is difficult to predict and measure, and even the direct cost-savings were significantly misestimated (as we discuss in chapter 4). In fact, the plan required considerable institutional resources--1.66 million validations at an average cost of $14 --and resulted in a very small drop in overall error. Error was reduced in one of the two items that were validated (which the Department cites) and error was increased in the other item (which the Department does not mention). Expanding validation further without the kinds of data and analyses we suggest in appendix IV could result again in ineffective action, from one or more possible causes, including mistargeted application items, inadequate documentation requirements, weak selection of applicants, and uncertain evaluation of the results.

We see no new evidence to support the Department's claim that further expansion of validation demonstrates "increased movement toward a cost/benefit perspective" (page 145). The Department's comment does not mention any source of new data on the costs of its requirements, and no such data were available for our review. It is difficult to see how further validation is "consistent with the goal-oriented type of error management advocated by GAO" (page 145), since the Department's comment does not

state goals for the expansion of validation and since it has already been shown that expanded validation reduced error very little.

"The Department lacks a cohesive plan to meet goals by developing and testing strategies that will coordinate and integrate its error reduction efforts."

The Department asks us to acknowledge that additional steps have been taken to reduce error since we collected our data and that the Department now has an overall strategy for addressing the findings of its quality-control studies. To support this statement, the Department cites several activities planned for the future. These include making unspecified changes in the processing of financial aid to integrate the management of separate programs, adopting a new model to guide quality-control activity, publishing a proposed regulation covering the verification of applicants' data on more title IV federal student-aid programs (only the Pell program now requires that applicants' data be verified), improving the integration of institutional program reviews with policy development and training design, and implementing the overall plan submitted to OMB in fall 1984 for corrective action in future years.

In the draft of our report, we acknowledged several of these steps, including the fall 1984 plan and the possible redesign of the application form, as steps that were taken after the close of our data-gathering in September 1984. However, considering these and the additional efforts noted in the comments, we do not agree that the Department has an overall strategy for responding to the extensive error found through its own research. We agree that initiatives such as those the Department lists in this comment could be promising, but the Department has not presented them in a way that shows how it interprets the research, chooses priorities among types of error for corrective action, and matches strategies with the problems chosen for attack. Thus, the Department gives us no basis for concluding that it has remedied the problems we discussed in chapters 4 and 5.

For example, during our review, we interviewed Department officials about the project to develop an "Integrated Student Aid Delivery System" (page 146). The work has been under way for some years, but it is directed by Department staff who are separate from the Office of Student Financial Assistance, and officials in the latter office knew little about it and could not tell us how it might address Pell error. The quality-control methodology that the Department describes in its comments seems to be a useful model for making decisions and taking action (involving goals, trials of solutions to problems, implementation, and evaluation), much as we have encouraged the Department to use. However, in the Department's general discussion of quality con-

trol, we could not discern concrete details of what adopting the ideas in the model will mean in practice or how error will be any more correctable.

A second example is the proposed regulation that would expand validation requirements to include applicants to other campus-based federal-aid programs. The Department has only preliminary data on errors in the campus-based programs; the first large-scale research on the subject is still going on and was recently delayed a year. Data from applicants to other programs probably have the same sorts of error problems we found in the Pell program, because the other campus-based programs share the same application forms, but payment consequences can differ if the need-analysis formulas for the other programs weigh the application items in different ways. Institutional error may also differ, because institutions have a greater role in the other programs than in Pell. Therefore, applicant validation is likely to be only a partial strategy against overall error in campus-based programs, and it is being implemented before the Department knows the full scope of the problem.

Finally, we agree that training and policy development could be more relevant tools for correcting error if they reflected better the results of program review. Much more important, however, would be linking training, policy development, and program review with what is known about error from the national research studies. In chapter 4, we note a series of weaknesses in the Department's use of training and program review as strategies against the error described in the research. These weaknesses should be strengthened rather than making wider use of data from unsystematic program reviews.

We have acknowledged that late in 1984 the Department submitted to OMB a new plan for dealing with error and that early in 1985 OMB told the Department to carry it out. It remains to be seen whether the Department will create the conditions for its successful implementation, including publicly stated goals and targets, strategies clearly linked to the chosen goals, strengthened internal management arrangements that permit clear lines of authority for error reduction, and plans for improving the data that will be used to assess the next round of corrective action.

"Problems of strategy include major information gaps which hamper planning by leaving sources of problems and reasons for error unidentified or unexplained."

The Department first agrees that there is room for improvement in gathering and evaluating data and then describes the Department's efforts to use data from the application processor to find applications that seem erroneous and to track eligibil-

ity changes after suspicious patterns have triggered selection for validation and subsequent correction. The Department also describes the use of error-prone modeling in selecting applications for validation. Finally, the Department says that an automated system will be used to keep track of data on institutions' "infractions and management weaknesses" (page 151) found in program reviews and that this will help in setting priorities for assigning staff and in understanding the relationship between the causes and symptoms of institutional error. The Department says that the problem is "a surfeit of data" (page 152), rather than data gaps, caused by the large amount of information the Congress requires for determining students' financial need.

We agree that the Department has a great deal of data, but we disagree that they result particularly from the complex need-analysis system. The difficulty we find is that Department managers do not have the data they need and must therefore make do with weak substitutes, including proxy measures and personal impressions from chance encounters. For example, the plan to enter data from program reviews into a computerized data base has limited utility when the data come from an unrepresentative set of schools using an unsystematic sample of records reviewed according to an unstandardized protocol. Such data will not show the symptoms of institutional error and their causes, because the review is not designed to produce a reliable measurement of error or data on causes.

The Department does not address our major points on its data gaps and limited analysis. These points include (1) the episodic and incomplete error data (chapter 3), (2) the weak data used at key points in setting the parameters of validation and in evaluating it (appendix IV), (3) the limited knowledge of institutions' activity in administering federal student-aid programs (chapter 4), and (4) the lack of information about practices in other agencies facing similar problems of quality control in administering programs that base aid on need (chapter 4). The Department's comments do not describe a significant program of data improvement to resolve any of these issues, although the Department notes (in an appendix) its general intention to study other agencies' practices.

"The lack of a central direction of policy on error and fragmented management responsibilities within the Office of Student Financial Assistance have led to confusion over responsibilities for acting upon error problems."

The Department believes that it has made considerable progress in addressing this concern, even though it also says that we did not adequately study the Department's methods of determining and coordinating policy. The initiative that the Department believes will best resolve the matter is the establishment,

since our review, of a new organizational unit responsible for quality control, the Debt Collection and Management Assistance Service (page 152), which reports directly to the assistant secretary for postsecondary education. The Department says that the new unit will be in a good position to develop policy on such topics as Pell grant error and will also be accountable for the direction, clarity, effectiveness, and measurability of error reduction. The Department also cites the Secretary's Student Aid Task Force (page 152), which it says will be developing a comprehensive strategy for improving financial assistance.

We disagree that we failed to consider fully the Department's methods of setting policy on Pell error. In our review, Department officials and outside observers with firsthand experience of the Department's decisionmaking agreed that all the existing processes had not consistently yielded timely and well-analyzed decisions on error and its correction.

We agree that structural change to clarify responsibilities and to place quality control at a high organizational level is potentially useful, especially since we have concluded in chapter 4 that unclear responsibility has led to inaction and flawed decisions. However, establishing an office is not by itself sufficient. Quality-control experts told us that effective work requires clear commitment at all levels of an organization. In addition, a new unit needs resources to carry out its assigned tasks. Throughout the period of our review, we saw only modest evidence of top-level commitment to the problem of Pell grant error, and public discussion by Department officials of the research data and corrective actions has been extremely limited. It is not clear that the new unit will be perceived as having a mandate to direct the work on the problem that other established units perform. And, in light of the assignment of responsibility to the same unit for another longstanding problem, that of collecting defaulted student loans, we question whether the resources will be available for the work that will be required to develop, coordinate, and oversee new ideas for the correction of Pell errors. Staff who were responsible for quality control before the establishment of the new unit and who will form a key part of it told us that they were frequently called to work on difficult problems throughout the Office of Student Financial Assistance, making it hard to sustain work on Pell error alone. This difficulty could continue, or intensify, if the unit has major responsibility for collecting defaulted loans.

Nor is it clear to us that the task force will be able to supply the overall direction that has been missing. This group has a wide-ranging assignment to consider a variety of issues on the management of student grants and loans, raising the question of when specific guidance for the Pell program can be expected. If the Office of Student Financial Assistance does succeed in strengthening its methods for making and carrying out decisions

on Pell error, there is a potential for overlap and lack of coordination with the task force.

Therefore, we agree that the new unit and the task force may be useful, but we believe that the conditions for their failure--too much work and too few resources--may not have been avoided. We see no reason to modify our suggestion that the Congress may wish to give the Department further direction on the subject of Pell grant error.

"The Department lacks reliable forecasts of the remedial effects of its validation strategy and needs to move away from making decisions under tight time constraints towards a more analytic approach."

The Department believes it is appropriate to devote greater resources to developing new criteria for selecting student applications for validation. Part of the research needed to do this is included in a task that is expected of the current application-processing contractor: to deliver an annual "requirements analysis," or review, of the past year's validation effort and a prediction of the effects of possible alternatives for the coming year. In addition, the Department says it will ask bidders on the next contract to integrate the annual file on applicants with a separate file on payments to recipients that is maintained by another contractor.

Concerning the more general problem of timely decision-making, the Department refers to the set of current initiatives collectively and suggests that through them the "evolutionary rather than sporadic nature of the Department's decision-making will become increasingly apparent . . ." (page 154). The Department says also that analysis for decisionmaking will shift from the measurement of error to the evaluation of its correction.

Regarding improvements in validation, the Department offers two additional points beyond those outlined earlier in its comments. The first concerns the "yearly requirements analysis" (page 153). It is not clear precisely what this analysis will consist of, but its ambitious objectives include (1) an examination of the current performance of validation selection methods, (2) an examination of alternatives for the future, and (3) the development of a specific "selection strategy for the subsequent award period" (page 153). In the absence of any detail on how these will be accomplished, we remain skeptical, given especially that all the necessary data to examine performance and to develop a full range of selection criteria (such as criteria that are based on error) are not available to the application-processing contractor. Improving selection methods and other aspects of validation will require an integration of the various kinds of data that we discuss in appendix IV.

The second point on validation is about a plan to merge the data on applicants and recipients. Although this could help strengthen the Department's analyses of the effects of validation and would be essential if computer-matching were to be used to combat error, a combined data system is apparently only a long-term possibility. The Department states only that it intends to "request offerors to devise a system" (page 154) for merging data when the next processing contract begins in 1987-88.

Neither the Department's point on the improvement of decisionmaking generally nor its other comments provide us with enough concrete discussion of improvements in such things as goal clarity, management structure, and data availability to change our conclusion that the Department needs a fundamental review of its approach to Pell grant error, aided by congressional consideration of the issue. The Department's future evaluation of corrective actions will be useful but no substitute for measuring and monitoring error. Nothing in the Department's comments suggests a clear commitment or a plan to continue and improve data on a basic element of policy--student and school error rates. These data could be gathered by institutions' studies of their own processes, by studies of national samples, or by other means, but no method is specified in the Department's comments. No improvement in decisionmaking is likely without timely, credible, and detailed data on error and its causes.

OMB COMMENTS

OMB concurs with our findings and believes the report will be useful. OMB notes particularly that it has shared responsibility for the Department's quick response to the evidence of 1981 Pell error rates and that there was and still is much to learn about how and why errors occur. The error rate in the Pell program is unacceptable, according to OMB. OMB reports that it will continue to take an active role in working with the Department on Pell grant errors, including a sharing of information on the promising practices of other agencies.

UNITED STATES DEPARTMENT OF EDUCATION
OFFICE OF THE ASSISTANT SECRETARY FOR POSTSECONDARY EDUCATION

JUN 1 1985

Mr. Richard Fogel, Director
Human Resources Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Fogel:

The Secretary asked that I respond to your request for comments on your draft report entitled, "Pell Grant Validation Imposes Some Costs and Does Not Greatly Reduce Award Errors: New Strategies Are Needed."

The enclosed comments represent the tentative position of the Department and are subject to reevaluation when we receive the final version of this report.

We appreciate the opportunity to meet with your staff to clarify the draft report before submitting our response and the opportunity to comment on the draft report before its publication.

Sincerely yours,

Edward M. Elmendorf
Assistant Secretary

Enclosure

400 MARYLAND AVE., S.W. WASHINGTON, D.C. 20202

INTRODUCTION

We have reviewed the General Accounting Office report on Pell Grant Validation, and we generally agree with the findings with only one qualification: they are a snapshot of efforts that existed for the 1982-83 Pell award year and, for obvious reasons, do not reflect the numerous Departmental initiatives either already underway or in advanced planning stages, which would fully address the issues and concerns raised in the report. We would also further point out that ED and GAO seem to agree in principle that some of the concerns and issues raised in the report result from systemic problems in a program that has undergone enormous and rapid growth since its first award year, 1973-74; these systemic problems may be corrected only by correcting the system that created them and will never be corrected by verification alone. As we discussed in some detail with you in our meeting June 5, many of the concerns you raise are further complicated by two additional factors:

- the Department has the difficult task of balancing sensitivity to differences in applicant circumstances against the resulting complexity in the application process that introduces a greater potential for student error (See VI-2 through VI-5); and pp. 123-25

- the Department is faced with the task of addressing the systemic problems while continuing to efficiently operate the programs.

Given the system in which we have to operate, we believe that our performance, was more than adequate. Since the time of your report, we believe even more strongly that ED has initiated several major projects that will satisfactorily address the concerns and issues GAO raises. The Department is designing a major initiative, known as "ISADS," aimed at providing coordinated management in all Title IV programs. The Department has also created an additional administrative office, the Debt Collection and Management Assistance Service (DCMAS), with oversight and coordination responsibilities, that should prevent any recurrence of the issues you have identified. DCMAS includes a Division of Quality Assurance and a Division of Systems Design and Development to provide the administrative structure for bringing to bear the latest technological advances in ADP and ongoing quality measurement efforts to simultaneously examine Pell problems globally and operationally. Furthermore, this unit will examine student aid programs generally, as they are currently structured and as they might be restructured, to eliminate the problems that have developed, probably inevitably, from the historical factors that have similarly figured in the expansion of the Pell Grant program. Additionally, OPE and OSFA are adopting, as part of the management process, a "Quality Control Cycle" for establishing, monitoring, testing, and reaching program goals. These initiatives are discussed in detail in the body of the response and listed in an appendix to the response.

In developing our response to your draft report, we have identified five major concerns and responded to those in detail. In Appendix A, we also respond to all other concerns that were mentioned in the report but were not its focus. And finally, in Appendix B, we have made a list of the ED initiatives that we discuss in our response and provide you with the names and telephone numbers of contact persons should you wish additional information about any of these initiatives. omitted omitted

The Department appreciates GAO's recognition of the major task we face. We invite you to share with all other interested parties the systemic nature of the problem and the limited range of solutions for correcting it. As long as legislation leading to program simplification is lacking, the Department must devote significant energies simply to program administration that it otherwise could direct towards the issues brought up in this report.

MOST SIGNIFICANT CONCERNS

1) GAO Concern: The Department lacks explicit goals and targets for corrective action on Pell Grant errors.

ED Response: While the Department has not laid out explicit goals for step-by-step error reduction in Pell Grant awards, as the GAO report acknowledges (p. 4-3) the Department has undertaken a broad variety of initiatives with the objective of assuring that needy students receive financial assistance when they need it, as provided by the appropriate acts of Congress. Many of the problems pointed out by GAO as stemming from the absence of explicit error reduction goals result from systemic factors affecting eligibility and award distribution, which render such goals meaningless without an accompanying reform of program re-structure. Even the GAO concedes that certain application items for which current governing legislation requires answers are inherently prone to error (p. 3-10, 11), or difficult to corroborate (p. IV-5), and that need analysis could be simpler (p. VI-2), with less data required from applicants (p. VI-5). However, without further Congressional guidance, the Department alone cannot take long or quick strides to resolve the tradeoff between sensitivity to an applicant's circumstances and reduced program complexity, that achievement of explicit error reduction goals would require. In particular, efforts towards redesigning student aid programs have suffered defeat in recent years, as Congress has mandated management to maintain the status quo in determining eligibility and making awards. p. 67 p. 59 p. 112 p. 123 p. 125

Beyond the limitations on management initiative posed by restrictions inherent in the current program structure, the immediate need to reduce error has compelled the Department to implement remedial strategies without devoting adequate

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time and staff resources to analyzing or testing them in advance. For 1982-83, the strategy undertaken by the Department was in direct response to pressures resulting from 1980-81 error studies, and was aimed as a "quick strike" needing minimal commitment of resources by institutions to produce the maximum error deterring effect. Although this effort was successful to some extent, the Department did not plan the method of selection or the limited nature of the items checked as a continued, long-term strategy. In the three award periods since then for which we have processed applications, validation selections have continued at similar levels, and the application items subject to proof have expanded to include the top four sources of student error identified by GAO (Table 3-3). This demonstrates the Department's increased movement toward a cost/benefit perspective on strategy development, that is more consistent with the goal-oriented type of error management advocated by GAO.

table 20

Moreover, the absence of the incremental quantitative sort of goals, which the GAO seemed to find most appealing, does not justify the conclusion that the Department lacks meaningful overall goals for improved program management, or that management has failed to take more immediate initiatives to achieve them. For 1985-86, the Department has already launched an electronic data submission pilot project that provides for increased interaction between students and their financial aid administrators, a reduction in unsolicited and likely inaccurate application corrections, the capability for automated reference to proper cost and enrollment data to reduce the likelihood of institutional error in award determination, and an eventual potential for allowing an electronic mode of application submission, as contemplated by GAO (p. VI-10). Furthermore, for 1986-87, the Department will introduce a redesigned application form that separately addresses independent and dependent students, so that applying will be a less complex task and unintentional error arising from applicant confusion about dependency status will diminish.

p. 127

As another major step forward, the Department is now developing a pilot project to make the institution, as the critical delivery point in student aid programs, the focus of quality control. This pilot project lays the groundwork for long-term management goals that include:

- enacting a comprehensive scheme for controlling error in an institution based on its error rates;
- developing error measurements in applicant reporting and award computation that lend themselves to institutionally specific and readily tracked corrective action plans; and

3

- establishing a national baseline for performance.

As these goals translate into functioning activities, establishing quantitative comparisons for rating their success becomes feasible and useful. However, until current initiatives become established procedures, process-oriented statements of goals are more appropriate as milestones than bottom line measurements of overall error reduction.

Thus, we believe we have in fact developed explicit goals for corrective action on Pell Grants that continue and expand the validation effort, while also supplementing it with the imaginative and coordinated efforts that constitute a valid "global" policy. The Pell electronic pilot project, the institutional quality control pilot project, the establishment of the Office of Debt Collection and Management Assistance Service (DCMAS) in the Office of Postsecondary Education (OPE), and the intensive efforts to integrate and systematize all these efforts, represent a staff effort both to correct systemic problems and to continue to efficiently administer this program, using the matrix of legislation and regulations that have developed throughout its history.

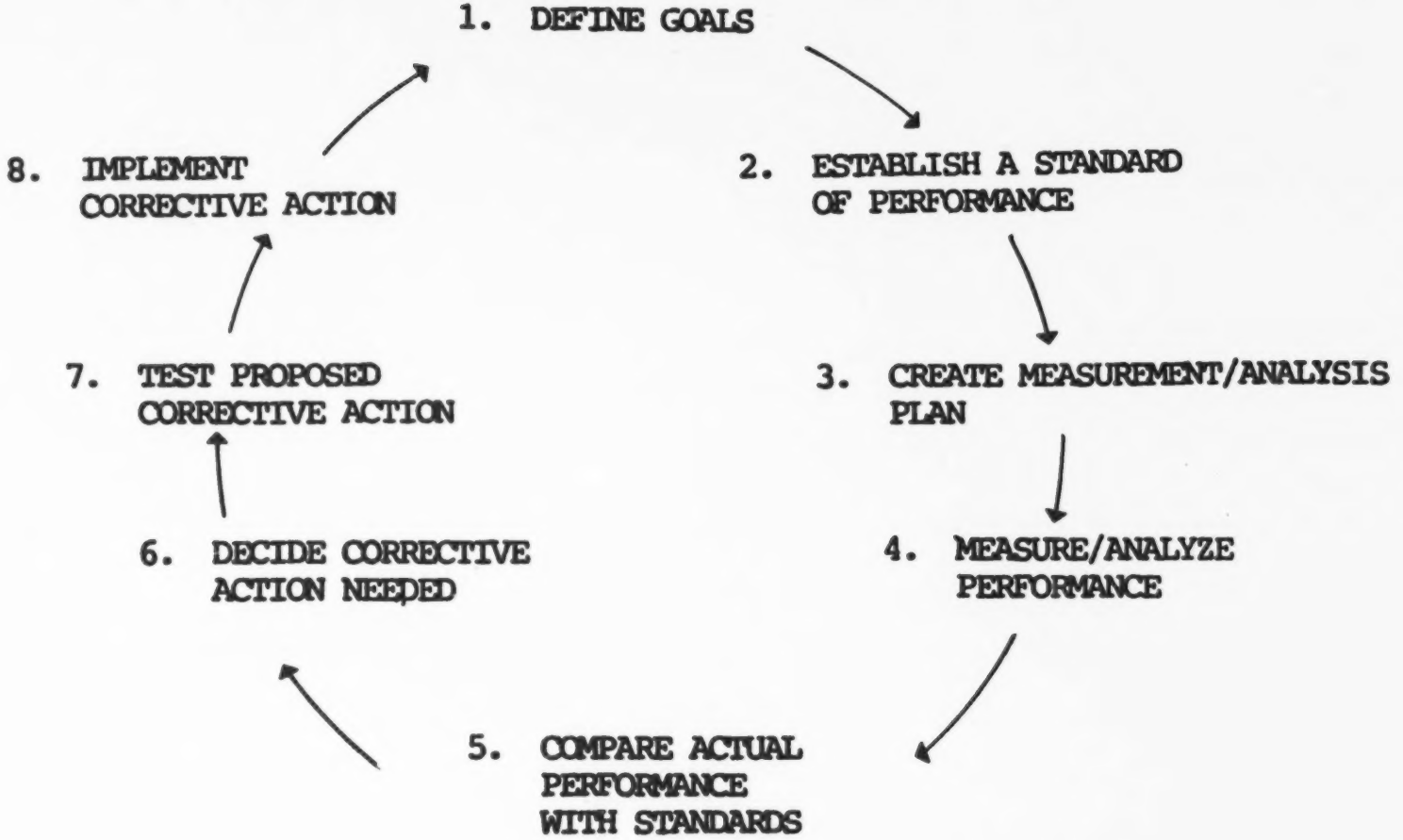
2) GAO Concern: The Department lacks a cohesive plan to meet goals by developing and testing strategies that will coordinate and integrate its error reduction efforts.

ED Response: The Department is in the design phase of a major initiative aimed at providing coordinated management in all the Title IV programs. This project, known as the Integrated Student Aid Delivery system (ISADS), is a joint effort of the Department's Office of Management and the Office of Postsecondary Education. The goals of the project are to improve delivery, coordination, efficiency and information systems. ISADS provides the opportunity to identify and correct deficiencies in the programs in a systematic way and has received widespread Departmental support.

Additionally, OPE and OSFA are approaching the implementation of these and other error reduction initiatives consistent with the quality control methodology summarized in the attached "QC Cycle" diagram. This "QC Cycle" concept (See Figure 1) will be adopted as OPE's methodological model for identifying problems and implementing solutions. The management of the applicant error rate will consequently improve, we believe, in the following ways:

Figure 1

THE QC CYCLE


1. DEFINE GOALS
2. ESTABLISH A STANDARD OF PERFORMANCE
3. CREATE MEASUREMENT/ANALYSIS PLAN
4. MEASURE/ANALYZE PERFORMANCE
5. COMPARE ACTUAL PERFORMANCE WITH STANDARDS
6. DECIDE CORRECTIVE ACTION NEEDED
7. TEST PROPOSED CORRECTIVE ACTION
8. IMPLEMENT CORRECTIVE ACTION

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- monitor the overall performance of the system for collecting, processing, editing, selecting and verifying applicant information;
- ensure the accuracy of data used for distributing aid;
- ensure the proper execution of formal procedures;
- identify points in the chain of student aid delivery where error is likely;
- provide management with regular feedback on the quality and efficiency of the various subsystems; and
- provide a means for developing, testing, and analyzing proposed corrective actions.

By implementing the quality control features of the "QC Cycle" as an ongoing activity within OSFA, we envision that problem areas will become readily identifiable and correctable there. This approach will also enable the Division of Quality Assurance to independently monitor OSFA's quality control processes and to check for aberrations and failures of that system, as part of its responsibility for the quality assurance feature of the "QC Cycle."

In order to further coordinate error reduction efforts as a unified approach, the Department is planning to publish a proposed regulation that would expand validation to more Title IV programs in an overall effort to reduce error. This proposal will help assure that aid under the Campus-Based programs is properly distributed and that Guaranteed Student Loans (GSLs) are made only to eligible students. By providing a single, integrated verification system for the Pell Grant, Campus-Based, and GSL programs, the Department hopes to bring all potential recipients of Federal student aid under a process that provides reasonable assurance of accuracy in data used to determine eligibility, without unduly burdening institutions with compliance checking procedures specific to each Title IV program. As a further improvement, this proposal addresses the GAO concern that the margin of allowable error in applicant reporting may be excessively loose (p. IV-6, 7), p. 113 by allowing no more than a $100 net difference between documented and reported values for all application items before an eligibility redetermination is necessary.

There are other examples of coordinated efforts that demonstrate the degree of interaction between various program related activities and challenge the GAO assertion about the absence of a cohesive plan. First, differences in the aggregate amounts of institutional error found in

the studies done for 1980-81 and 1982-83 are largely attributable to the regulatory changes and refinements that have arisen from a longstanding effort to coordinate the results of program reviews with policy development. Moreover, with the introduction of the Pell Grant quality control pilot project, the involvement of staff doing program review will cover both developing regulations governing new institutional procedures and devising methods to integrate successful institutional efforts to reduce error, with institutionally perceived program review benefits. Other recent regulatory changes, resulting from the interaction of different but related Department functions, that demonstrate an integrated approach to properly channeling student aid funds under institutional stewardship include:

- limiting the amount of remedial course work for which a student may receive Title IV funds;
- requiring the return of payments made to students who never attended any classes; and
- making class attendance a part of the definition of "enrollment."

Secondly, while the Department's institutional training will continue to offer programs for disseminating regulatory and procedural changes, it will broaden its responsive emphasis to provide targeted training efforts that address specific institutional deficiencies, when program reviews find that areas of institutional misunderstanding or lack of information are the source of the problems detected. However, the benefits of this approach may be compromised, since in the absence of new legislation, the Department lacks the authority to require the participation of institutional personnel in training activities, regardless of how great the Department's appraisal of their need for it may be.

In conclusion, contrary to GAO's assertion, the Department has developed a cohesive strategy for reducing the error rate in the Pell Grant Program, as evinced by the short and long-term corrective action plan submitted to the Office of Management and Budget and recognized by GAO (p. 5-11). Some of the proposals for corrective action will commence with the 1985-86 award year. Other proposals will require more time to implement because of necessary regulatory changes, or because of changes to the authorizing legislation which need Congressional consent. p. 90

Overall, while we believe there is always room for improvement, we request GAO to acknowledge in their final report that the Department has taken additional steps to reduce error, and does in fact have an overall strategy for addressing the findings of its quality control studies.

3) GAO Concern: Problems of strategy include major information gaps which hamper planning by leaving sources of problems and reasons for error unidentified or unexplained.

ED Response: While we agree that there is room for improvement in gathering and evaluating data, the Department has consistently reviewed a substantial body of information since the inception of validation in 1978-79. Although the Department lacks many kinds of data that would be most appropriate for attributing error to specific causes, it has attempted to compile information from the application processing system that can allow identification of suspicious data and measurement of the effects on eligibility arising from correcting it. The system of edits used to check information supplied by applicants for consistency and reasonableness has undergone evaluation several times by independent contractors and the application processing contractor, and has demonstrated its effectiveness as a mechanism for eliciting corrections to reported information. In addition, a recently developed system for management information reporting has provided regularly produced tables and graphs that further extend the Department's knowledge about the correction behavior of students having suspect data, but who are not selected for validation. This system allows for data comparisons within and across award years and presents projections derived by the Department, so that current data appears framed retrospectively and prospectively.

For each year since the Department began selecting applications for validation, it has gathered information during the processing year, as well as in special studies prior to each year's development of criteria, to determine the affect on eligibility resulting from changes made by the applicant subsequent to selection for validation. The selection criteria are then evaluated to determine and rank their effectiveness in selecting those applicants who are likely to have misreported. Since 1983-84, the adoption of validation status codes, on the payment documents submitted to the Department by institutions, has permitted the analytical capacity for determining the degree to which selection by each criterion has resulted in detecting data requiring correction or within allowable accuracy tolerances. As the development of the new Pell Grant

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payment processing system progresses, the Department will be increasingly able to use this information which so far it has been unable to organize, because of problems in system programming arising from the novelty of the process.

With the exception of 1982-83, the Department has developed new criteria for selection and revised existing criteria to improve targeting. In the past two years, we have implemented error prone modeling techniques which use applicant characteristics to predict which groups are likely to have made errors. Although the Department had planned to adopt at least partial results of this analysis technique for use in 1982-83, it did not follow through on implementation that year for two primary reasons:

1) at that time error in the program, based on the Quality Control Study of the 1980-81 award year, seemed so widespread that the only adequate response was to select all applications, at least for a portion of the processing period;

2) the error prone model developed was still considered an experimental approach, which needed an additional year for further refinement and evaluation.

By the time 1983-84 processing began, development and evaluation were completed, and this selection technique was used to supplement existing criteria based on the Department's experience.

Error prone models significantly enhance selection particularly in comparison to random sampling, and represent a step forward in targeting applications that need further review. The Department has used error prone models as a tool to expand validation selection on a targeted basis for three years, and each year has refined and improved them.

From the standpoint of detecting institutions whose practices necessitate greater oversight, program review staff are developing an automated system which will provide summary data on a number of aspects of institutional stability, including its history of infractions and management weaknesses. This will allow improved monitoring of institutions with a high likelihood of administrative deficiencies, and provide a mechanism for setting priorities in assigning staff. By this means, the Department should attain a better understanding of the relationship between the causes and symptoms of institutional error.

Again, ED attributes the major cause for this concern to systemic problems in the Pell Grant Program. The mandate to ensure equity in this need-based program has in past years resulted in a longer Federal application, so that on occasion the problem has not been the information gap you cite, but a surfeit of data that makes analysis and interpretation difficult. We believe that the initiatives we discuss here and elsewhere in the report resolve GAO's concerns and represent a major step in the systematic and thoughtful gathering, analysis, and reporting of Pell Grant Program data, including data about validation.

4) GAO Concern: The lack of a central direction of policy on error and fragmented management responsibilities within the Office of Student Financial Assistance have led to confusion over responsibilities for acting upon error problems.

ED Response: Of all the concerns raised by GAO in its report on Pell Grant validation, we believe we have made the most progress in redressing this concern. Before listing the initiatives that justify this statement, however, we would like to point out that there have always been both routine and issue-oriented mechanisms for determining policy and coordinating management. Within the Office of Postsecondary Education, these include weekly meetings of all division directors, inter-divisional task forces to address particularly formidable tasks, and the Office of Policy Development. We believe, again, that GAO has reached its conclusion using facts that it has derived from the nature of systemic problems with the Pell Grant Program, rather than from a comprehensive review of the mechanisms for policy making and coordination.

ED continuously examines its policy making and management accountability processes. The establishment of the Debt Collection and Management Assistance Service in the Office of Postsecondary Education, which is one result of this constant self-evaluation, now provides the framework for even more carefully coordinated development of policy related to error reduction in the Pell Grant Program and for a clearly identifiable management structure accountable not only for central direction of efforts, but also for the clarity, effectiveness, and measurability of the error reduction process, GAO is also aware of the Secretary's Student Aid Task Force, on which the Assistant Secretary for OPE serves. The work of this Task Force will further intensify our efforts to manage the programs efficiently and effectively by reviewing past efforts to achieve this goal and developing from this review a comprehensive strategy for the delivery of Federal student financial assistance, including Pell Grants, to eligible students. The Task Force and DCMAS alone constitute significant Departmental efforts to reduce error.

However, in our three responses to your major concerns that precede this discussion, ED has also discussed other major initiatives either underway or in the advanced planning stages that reflect careful direction of policy, coordinated management of error reduction activity, and identifiable and accountable management authority. These include the Secretary's Student Aid Task Force, the Integrated Student Aid Delivery System Task Force, the Pell Grant Electronic Pilot Project, the Institutional Quality Control Pilot Project, the "QC Cycle" shown in Figure 1, the proposed Integrated Verification Regulations, the increase in the number of items the Department requires each institution to validate, the redesigned Application for Federal Student Aid (AFSA) used by Pell Grant applicants, and the continuing review of the clarity and completeness of both the Federal form and accompanying instructions.

All of these initiatives directly or indirectly affect the Pell Grant Program and increase the Department's capability initially to detect and correct error, and ultimately to reduce error to a level that will ensure that the goals of the Program are being met and that will reinforce the public's confidence in the management and integrity of the Pell Grant Program.

5) GAO Concern: The Department lacks reliable forecasts of the remedial effects of its validation strategy and needs to move away from making decisions under tight time constraints towards a more analytic approach.

ED Response: As stated in preceding responses, the Department has maintained an ongoing analysis process that has laid a statistical foundation for justifying and evaluating the validation strategies that it has already adopted. Beyond this effort, the Department believes devotion of greater resources to developing new validation selection criteria is appropriate. As an integral aspect of the "QC Cycle" described previously, this data collection and organization will increasingly address long range goals and concentrate on redirected analytical functions.

An important part of this ongoing research is now included as an annual deliverable under the current application processing contract. This yearly requirements analysis serves as the basis for developing a selection strategy for the subsequent award period, and features an examination of system performance for the current year using a sample data base, as well as a predictive capacity for evaluating the performance of proposed selection criteria. Its results will be sufficient in breadth and scope to allow effective error rate management and eventual reduction, because it

can cover examination of as yet unimplemented approaches, including the selection and verification of applicant data used to establish eligibility for other Title IV programs besides Pell Grants. Aside from forward looking analysis, our contract for processing applications also provides an improved method for accessing and analyzing current data through both an on-line information center and the availability of "ad hoc" reports, which can be produced irregularly and designed to suit specific immediate information needs.

In order to remedy the analysis problems caused by the difference in timing between receipt of application data and receipt of corresponding payment data, the Department intends in its next RFP for Pell Grant processing to request offerors to devise a system that will integrate both functions and provide a complete record from application to payment. Such an integrated system is made possible by a revised design of the Student Aid Report that allows for automated payment processing, faster institutional account reconciliation, and incremental adjustment of institutional allotments during the current award period. When combined with other initiatives that will enhance development of validation selection criteria, the Department will achieve a greatly improved capability for accurately predicting program savings due to its error reduction efforts and for adjusting selection parameters to meet established goals. Consequently, the Department could then balance selection volume with its concomitant burdens on students and institutions in an objective manner along a formally established procedure.

As current initiatives become established procedures, the evolutionary rather than sporadic nature of the Department's decision-making will become increasingly apparent, with the gradual shift in its analysis focus from error measurement in existing functions to corrective action evaluations through pilot projects and field tests, that will allow experimentation without disrupting service. The newly created organizational structure within OPE but distinct from the program administration structures that was described earlier, demonstrates the Department's commitment to sound and continuous oversight practices, and serves as a mechanism for assuring adherence to a rational and systematic approach for achieving error reduction.

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

JUN 05 1985

Mr. William J. Anderson
Director
General Government Division
United States General
Accounting Office
Washington, D.C. 20548

Dear Mr. Anderson:

Thank you for the opportunity to comment on GAO's draft report on verification of applicant data in the Pell grant program (PEMD-85-10, dated 4/29/85). We appreciate GAO's extension of the time available to us for review.

We generally concur in the report's findings and believe its lists of "matters for consideration" to be thoughtful and appropriate ones. The detailed information in the report is extremely interesting and will be of considerable use both to OMB and the Department in making further progress on this front.

Let me say clearly that OMB shares responsibility for the Department's recent substantial increase in verification requirements. Both we and the Department realized when error rate data became available that there was (and still is now) much to learn about how and why errors occur in these programs, but error rates were so high that some immediate and decisive management response was clearly required. The Department, with our approval, took what seemed to be the most sensible short-run steps at the time. Since then, the Department has taken a number of additional steps to learn more about the problem and to improve our ability to address it more effectively, while continuing stringent validation requirements. We believe that this is an appropriate approach with programs afflicted with such unacceptably high error rates.

With regard to specific report comments directed to OMB, we appreciate GAO's support of our efforts to assist the Department in reducing Pell errors. We fully intend to continue an active role, including supporting expansion of validation to other student aid programs. In this regard, we are particularly concerned by GAO's finding that there is limited feedback from ongoing program review activities to either improve quality control actions (p. 4-10) or revise training curricula (p. 4-12). We intend to review this matter further with the Department. pp. 70-71 p. 71

We appreciate and share GAO's concern about the need for further sharing of information across agencies on quality control. In this specific instance, we have put ED staff in touch with Labor Department staff who have had recent experience in mounting a comprehensive quality control program. In addition, examiners with responsibility for programs with established quality control systems, like AFDC, are assisting our Education Branch in developing quality target approaches of the sort GAO suggests in pp. 16-18 of Appendix VI; the Department is also looking into such approaches. More generally, OMB is actively promoting the exchange of promising practices among Federal agencies to reduce payment errors through the Payment Integrity project. Under this Reform 88 initiative, Federal agencies are working together to develop and implement better verification methods, computer matching techniques, and quality control systems. OMB will continue to facilitate and improve the development of successful error reduction strategies for the Pell Grant program through this initiative.

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Thank you again for the opportunity to comment. We regard this report as a useful contribution to addressing a major management problem and look forward to its publication in final form.

Sincerely,

Joseph R. Wright, Jr.
Deputy Director

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